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50-State Study
1995 Update

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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
NRD	-	Natural Resource Damages
OGC	-	Office of General Counsel
O&M	-	Operation and Maintenance
OPA	-	Oil Pollution Act
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

This year marks the 20th anniversary of New Jersey's landmark Spill Compensation and Control Act, which pioneered the concept of government programs to clean up contaminated land. Four years later, Congress modeled the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, generally referred to as Superfund) on New Jersey's Spill Act. In the sixteen years since the passage of the federal Superfund law, the nation has realized that contamination of land and water with hazardous substances is far more common, and more expensive to clean up, than was thought in 1980. Coordinated cleanup efforts between federal and State agencies are currently addressing numerous sites targeted by the U.S. Environmental Protection Agency's (EPA's) National Priorities List (NPL), the list of sites where there are uncontrolled releases of hazardous substances that are the highest priorities for long-term remediation.

At NPL sites, the role of the States ranges from required cost sharing at federally funded cleanups to active site management. A vast number of contaminated sites do not meet the criteria for inclusion on the NPL. For these non-NPL sites the federal government's role is likely to be limited to site assessment and emergency response or removal activities. For many non-NPL sites, the federal government may not be involved at all. Thus, if any government-supervised activity is to occur at non-NPL sites, States will have to oversee, enforce, or fund cleanups. For these reasons, the role of the States in addressing contaminated sites, independently and in concert with the federal government, has become increasingly important. 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, encourage private party cleanups, take enforcement action where needed to ensure private cleanups, and conduct oversight activities.

A key step in enhancing the Federal-State partnership is to understand the States' own cleanup programs aimed at non-NPL sites. This is the objective of the present report. This report updates the results of a study initially conducted in 1989 (and updated in 1990, 1991, and 1993) by the Environmental Law Institute (ELI) in cooperation with EPA's Office of Emergency and Remedial Response.

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, Tribal and Site Identification Center is responsible for developing regulations, guidance, and policy related to this Congressional mandate. As part

of its responsibilities, the Center tries to maintain comprehensive information about State capabilities to contribute to or manage cleanups at hazardous substance sites. The Environmental Law Institute's Center for State, Local, and Regional Environmental Programs helps States and the federal government to improve State environmental programs and promotes better public understanding and cooperation between State and federal environmental agencies. Prepared by ELI under a cooperative agreement with EPA, 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, staffing, funding, expenditures, cleanup standards, and cleanup activities. 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."

Research Methodology

To ensure that the information for this report would be complete and accurate, ELI collected statutes, regulations, and other State documents, interviewed State program staff by telephone, and verified information for each State. ELI initially reviewed both the information gathered for the prior versions of the report and newer information 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 to reconcile any discrepancies in the data.

In assembling this report, ELI has tried to take a "snapshot" of State cleanup programs, while recognizing that they are dynamic and that changes may occur after the publication of this update. For the purposes of this report, ELI used State information that was available on or before December 31, 1995. States were provided an opportunity to review and update all of the information in the State program summaries. Tables of all the State programs were then compiled using the verified State information. Table V-22, which lists the cooperative agreements that States have signed with U.S. EPA and the grants they receive from EPA, is the only table based on information supplied by EPA rather than the States.

Organization of the Report

The report is divided into three discussion chapters, one chapter devoted to tables, and a chapter of State program summaries. Chapter II highlights the most noteworthy developments in State capabilities that emerged in comparing the 1995 information with the previous reports. An analytical overview of State superfund programs is provided in

Chapter III. This overview examines statutes, program staffing and organization, sites, cleanup activities, cleanup policies and standards, public participation requirements, and enforcement tools. Chapter IV – this Update's "special topic" Chapter – discusses the States' voluntary remediation programs and brownfields programs, a topic of particular interest and activity first covered in the 1993 Study. Chapter V presents detailed program information arranged in tables that facilitate comparisons among the 52 States. Chapter VI contains individual summaries of each State program. For the few States that do not have non-NPL cleanup programs, the summaries focus on their capabilities to address contaminated sites using other authorities and resources.

Comparison of State Data

There is significant interest in State cleanup programs due to the pending reauthorization of the federal Superfund statute. The information in this report will consequently receive increased scrutiny and use. It is, therefore, critical to acknowledge the limitations of this data in directly comparing State programs.

First, *this study covers non-NPL sites, with information about NPL sites provided primarily for context.* Second, differences in State program terminology, administrative procedures, and accounting procedures, as well as in the detail of information provided by States, limit the comparability of programs. Variation among State cleanup programs should be expected because there is no national standard which they must meet. There may also be differences between the information presented in this report and in other studies concerning State cleanup programs. This is due not only to the differences among States but also to the precise program questions asked. The most appropriate comparisons, therefore, are among State non-NPL cleanup capabilities and activity levels, and similarities and differences in the general types of cleanup authorities and policies applied.

Chapter II

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Developments in State Programs

The capability of States to clean up and to oversee others who clean up contaminated sites depends on many factors. A comparison of information from the 1989, 1990, 1991, 1993, and 1995 versions of *An Analysis of State Superfund Programs* shows that, overall, States have improved their cleanup capability since 1989. The following bullets provide an overview of States' capabilities during their fiscal years ending in 1995 (FY95).

- For the first time, the numbers of sites States identified as needing attention (i.e. some type of cleanup) declined to approximately 30,000 sites from approximately 40,000 sites in 1993.

- The number of known and suspected sites, a larger group that may include sites that have not yet been investigated, also declined to approximately 85,000 from approximately 100,000 in 1993.

- Aggregate program staff levels continued the trend of slight increases, rising less than three percent during the periods covered by each of the last two studies; the levels from 3,394 in 1991 to 3,491 in 1993, and to 3,585 in 1995. Total legal support was 211 FTE attorneys, down from 247 FTE in 1993, and from 262 in 1991. The total number of attorneys providing legal support to State cleanup programs has declined almost 20% since 1991.

- State cleanup funds had a combined balance (including bond authorizations) of $1.46 billion, a slight (4%) decrease from $1.5 billion in 1993, which was down substantially from over $2.2 billion in 1991.

- During FY95, 44 States reported spending $386.1 million for cleanup activities, substantially less than the more than $700 million spent by 44 States in 1993. States also obligated another $363.4 million to be spent in the future, also substantially less than the $459.2 million obligated for future activities in 1993. Total additions to State cleanup funds during FY95 were $444.58 million, less than half of the $957.3 million added to State funds in 1993.

- An increasing number of States are standardizing their cleanup standards by adopting regulations either specifying the standards or the procedures for determining the standards. Twenty-four States have promulgated cleanup standards, up from 19 in 1993 and only seven in 1991.

- Fifty States use MCLs or MCLGs as cleanup standards where appropriate and 49 States apply surface water quality criteria. Forty-five States use risk assessments in determining cleanup levels. Background or ambient quality is a reference point for 43 States and the same number use EPA guidelines in determining cleanup standards. Thirty-seven States apply groundwater standards to non-NPL sites and 27 apply soil standards.

- The number of States with public participation requirements continues to increase. Forty-eight States now have public participation requirements, up from 45 in 1993 and 43 in 1991. Of these, 30 States have statutory or regulatory public participation requirements, up from 24 in 1993 and 22 in 1991.

- The number of States requiring specific types of basic public participation procedures has also increased. Forty-four States solicit public comments during the site handling process. Forty-six States may hold public meetings or hearings.

- State enforcement and cost recovery provisions have remained relatively constant. Twenty-five States provide for punitive damages -- the same as 1993, and up from 22 in 1989. Most of the new State statutes enacted since these reports began in 1989 have adopted the strict, joint and several liability standard. Thirty-four States use this standard; six of these allow some apportionment, however. Only five States, one more than in 1993, specify a proportional liability standard. At least two States have recently moved away from strict, joint and several liability. Illinois recently adopted a proportional liability standard and Michigan amended its law to require proof of causation in some situations and for certain categories of potentially responsible parties, while retaining strict, joint and several liability as the general rule.

- Forty-three States have retroactive liability under their State cleanup laws.

- Twenty-eight States report that they are authorized to recover for damages to natural resources caused by releases of hazardous substances. Only eight States, however, reported having recovered damages under their State laws, while seven States reported having natural resource damage claims pending.

- Twenty-five States have mandatory property transfer provisions, up from 23 in 1993, and 18 in 1991. Property transfer provisions are requirements designed to identify contamination before or at the time of transfer of property. 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. Several additional States have property transfer provisions allocated with voluntary cleanup programs.

- Thirty-one States have voluntary cleanup programs; two more are developing programs, one of which is pursuant to recently enacted legislation. In 24 States the voluntary cleanup programs are authorized by statute; eight States created their voluntary programs by regulation or policy. The voluntary cleanup program is the only non-NPL cleanup program in three States.

- States encourage voluntary cleanups in a variety of ways: 20 States provide some form of enforcement or liability waiver; seven States provide financial incentives, including loans, tax credits, payment of orphan shares, or caps on costs; seven States report they are more responsive to participants needs or guarantee less oversight; five States will not place the site on the State list or on CERCLIS, or will remove the site from the State list; and two States provide technical assistance.

- States determine eligibility for their voluntary programs in two ways: 21 States determine eligibility by defining which types of parties may participate; 12 States determine eligibility by defining the types of sites which may be included in the program.

- Cleanup and redevelopment of brownfields sites is an increasingly important issue at the State and national level, and most voluntary cleanup programs address brownfield sites. Some States have focused more specifically on brownfields, as distinct from the broad universe of sites eligible for voluntary cleanup. Fifteen States have formal brownfields programs and seven more are in the process of developing programs.

- Three States, Illinois, Minnesota, and Oregon, each have more than 100 brownfields sites currently under redevelopment.

These few statistics are among the more outstanding indicators of the breadth and vitality of the State 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

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State "Superfund" Programs

Since 1980, the vast majority of States have enacted laws that govern cleanup of contaminated land and establish funds to pay for cleanup of non-NPL sites where no responsible party is available, able or willing to do it. Thus, many States are now into their second decade of cleaning up land contaminated by hazardous substances. The decade or more of experience that many States have accumulated is having visible consequences for their cleanup programs.

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;

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

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

An important aspect of the current state of development of State and federal cleanup programs is that the State and federal laws are independent. The federal law did not follow the pattern of the federal pollution control laws in setting national standards which could be administered by the States after their programs received approval by the federal agency. The lack of a requirement to submit their programs to federal review and approval has freed States to experiment widely and to develop some highly innovative and effective cleanup programs. However, it also has allowed States to do little or nothing to clean up contaminated sites that are not on the NPL. Such inaction might be rational and appropriate if a State has few non-NPL sites, but only North Dakota has determined, after assessing its suspected sites, that it has no sites for which cleanup is necessary at this time.

A. OVERVIEW OF CLEANUP ACTIVITIES AND CAPABILITIES

What is remarkable about the current status of State cleanup programs is the degree of progress that most of them have made since ELI first studied them in detail in the late 1980s. For example, in 1989 half of the States were actively managing cleanup activities at non-NPL sites, but by 1995 44 States were actively managing non-NPL cleanups. As early as 1989, all but two States had established a fund from which they could pay for cleanups if no responsible parties could be found to pay for, or conduct, the cleanup. But 18 of those States' funds had balances of less than $1 million, which is likely to be insufficient to pay for a permanent remedy at even a single site with moderate contamination. In 1995, only Nebraska and the District of Columbia were without a fund, and more significantly, only six other States have funds with balances too small to pay for a permanent cleanup.

Another indicator of the maturation of State cleanup programs is the degree to which States have standardized their decisions on the crucial question of "how clean is clean". In the late 1980s, most States were still in the site discovery and assessment stage and few had much experience with deciding which cleanup standards to apply. Thus, cleanup standards were largely determined on an ad hoc, site-by-site basis, and many States were unclear about where to look for guidance or for appropriate standards. In 1989, 20 States said they used EPA guidance in determining cleanup standards, but few States specifically identified other potential sources of standards. By 1995, 43 States used EPA guidelines, but more significant is that EPA is no longer the principle source of standards for any State. The greater maturity of State cleanup programs is well illustrated by the increase in States that have established cleanup standards by regulation from two in 1989 to 24 in 1995 – half of the States have moved from *ad hoc* decision-making to standardizing this crucial decision.

The States have also matured in their use of other sources of standards and in their methodology for choosing standards. Risk assessments, for example, were used by only 14 States in 1989, but by 1995, 45 States were using health-based risk assessments in setting cleanup standards, and many were considering both cancer and non-cancer risks. Virtually all of the States now use drinking water standards where appropriate, compared to only seven States in 1989. Similarly, 48 States now use water quality criteria, compared to 33 in 1990. Also, 37 States now use groundwater standards and 27 use soil standards, a development that is particularly noteworthy because the States have largely developed these standards on their own.

While States have been growing and maturing in their administration of their cleanup programs, many have continued to develop new ideas and programs for coping with the

variety of issues that arise as government tries to clean up contaminated land. Voluntary and brownfields programs have been the most widespread developments in the past few years, with 31 States having specific programs to encourage voluntary cleanups (plus two more in development) and 15 States having formal programs targeting brownfields, with eight more developing a brownfields program. Even Nebraska, which has not previously had a cleanup program, now at least has a voluntary cleanup program.

The desire to encourage more voluntary cleanups and to facilitate cleanup and redevelopment of brownfields has led a few States to change their entire cleanup programs substantially. At the end of its 1995 legislative session Illinois created a new brownfields program that is likely to essentially replace its existing successful cleanup program. Any owner or operator of contaminated property may now elect to be covered by the new voluntary brownfields program as long as the site is not already required to be cleaned up under federal Superfund, RCRA, or underground storage tank laws, nor is under investigation pursuant to a federal court or U.S. EPA order. The new law puts the owner or operator in control of the cleanup, from the pace to the choice of cleanup standards, with the Illinois EPA reviewing and approving the site assessment, remedial action plan, and report of completion of the cleanup. The agency is held to strict deadlines of 60 days for reviewing the reports and 30 days for final approval of the cleanup after the end of the 60-day review period. If the agency approves the completion of the cleanup, the owner or operator receives a release from future liability as long as the site is used in accordance with the terms set by the agency.

These are fundamental changes from the prior system, and as such are the types of State experiments encouraged and relied on by the federalist system of government. Michigan, Pennsylvania, Minnesota, Massachusetts, and Connecticut, among others, are experimenting in other ways. Experience with their varied programs will undoubtedly provide greater insight into what programs can be effective at cleaning up contaminated sites so that they can safely be used again.

This chapter presents detailed information on State programs for all 50 States, the District of Columbia, and the Commonwealth of Puerto Rico. 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. 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 States for the purpose of addressing sites contaminated by hazardous substances. In some States with comprehensive cleanup statutes, these laws include State response funds, enforcement authorities, priority lists, provisions governing property transfers, cleanup standards, voluntary programs, 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.

No new comprehensive CERCLA-type laws have been adopted since the 1993 Update. However, a significant number of States have enacted new legislation during the past two years. For example, Utah passed legislation making it clear that the State cannot impose liability retroactively for releases that occurred before March 18, 1985. A number of States, including Kansas, Florida, Minnesota, and Tennessee enacted new legislation to address drycleaner sites. Typically, such legislation includes a separate fund dedicated to cleaning up sites contaminated by drycleaning solvents and funded by fees paid by current drycleaners. Other topics addressed in new legislation include cleanup standards (Illinois, Michigan, Oregon, Pennsylvania), public participation (Rhode Island, Nebraska, Montana), property transfer (Connecticut, Vermont), citizen suits (Nebraska, Washington), enforcement (Rhode Island, Nebraska), liability standards (Michigan, Illinois), cleanup funds (Tennessee, Connecticut), and lender liability (Mississippi). Provisions and programs intended to encourage voluntary cleanups have been among the most common subjects of new legislation in the past two years. Connecticut, Rhode Island, Delaware, Pennsylvania, Alabama, Tennessee, Michigan, Ohio, Wisconsin, Louisiana, Texas, Nebraska, Colorado, Montana, and Arizona report having passed voluntary program legislation since 1993, while other States, including New York, California and Nevada, have adopted voluntary programs by administrative action.

C. HAZARDOUS SUBSTANCE SITES

Site Inventory

State programs have responsibility for a substantial number of sites contaminated with hazardous substances. While approximately 1,300 sites are on the National Priorities List (giving EPA primary jurisdiction for remediation), tens of thousands of sites are not on

the NPL. These sites fall primarily to the States (or to EPA's removal program) for remediation.

Ascertaining the number of non-NPL sites is critical to understanding the magnitude of the cleanup task facing the States. This study reports the hazardous substance sites identified by the States and excludes petroleum-contaminated sites and leaking underground storage tank sites (except where the latter cannot be distinguished in a State's reporting system). The number of non-NPL hazardous substance sites for each State is reported in Table V-3.

ELI has used three categories for reporting the number of non-NPL sites. These three categories have been devised to assure that, even though States use widely differing internal approaches in accounting for sites, similar sites are counted in similar ways. The categories and approximate 1995 totals are:

- known and suspected sites (~85,000 sites)
- sites identified as needing attention (~30,000 sites)
- sites on a State inventory, priority list, or registry (numbers not comparable)

The broadest category of hazardous substance sites is *known and suspected sites*. This category reflects the maximum number of sites known to each State and tracked in some way in connection with its cleanup program. The number is an estimate in some States, but is a real number in most. In some States, this category includes among the known sites those that have not yet undergone assessment. This category is most useful (1) in determining how large each State perceives the universe of sites is within its own jurisdiction, and (2) in defining an outer limit to the national task of addressing hazardous sites. The number of known and suspected sites in each State range from 0 (in North Dakota) to 20,000 (in New Jersey). In 1995, the States reported approximately 85,000 sites in this category, a decline from the over 100,000 reported in 1993. The decline appears to result primarily from activities in a few States resulting in better classification of sites, as well as from completion of site assessments.

Large changes in the numbers for known and suspected sites between the 1993 and 1995 studies occurred in a handful of States. Increases include Massachusetts, where the number of known and suspected sites doubled (to 12,000) because of a changed reporting system adopted in October 1993 that counts each notification of a release rather than each location to be investigated. Minnesota's total also rose (by about 3,100 sites) because of a more aggressive effort to identify the entire universe of sites. Illinois' total rose by about

3,600 sites, primarily because its real property transfer reporting requirements and voluntary cleanup provisions increased the number of sites known to the State. Conversely, the California total in this category dropped dramatically (by over 20,000 sites) because of systematic reclassifications of sites and better assessment of which sites require action. Pennsylvania's and Hawaii's totals also dropped (by about 2,900 and 2,500 sites, respectively), reflecting completion of most of the PAs (preliminary assessments) for sites on the CERCLIS database. Michigan's total dropped by about 7,000 sites, in part because the earlier figure had included underground storage tank sites.

The second, and most useful, of the hazardous site categories tracked by ELI is *sites identified as needing attention*. This category -- a subset of the known and suspected sites -- consists of 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 facing each State's cleanup program, and is the most useful for national and State program planning purposes. The number of sites needing attention in particular States ranges from 0 (North Dakota, District of Columbia) to 7,000 (Massachusetts). Nationally, the States reported approximately 30,000 sites in this category in 1995. This is a decline of approximately 10,000 sites since the 1993 study. While some of this decline reflects reclassification of sites, it also reflects continued progress in accomplishing cleanups. For example, Michigan's reclassification of UST sites since the 1993 study accounted for a substantial reduction, but New Jersey's completion of remedial actions also produced a large decline in this number. Few States had significant increases in sites needing attention. None increased by more than a few hundred. Illinois' number rose somewhat because more sites were identified in connection with voluntary cleanups, for example. In summary, it appears that the total universe of sites requiring attention has stabilized and is beginning to decline as State assessment and cleanup programs have had an effect. Only five States have more than 1,000 sites in this category: Massachusetts (7,000), New Jersey (6,500), Michigan (2,764), Alaska (1,347), and California (1,079).

The third category reflects the number of sites maintained on a State's official *priority list, inventory, or registry*. Approximately 35 States maintain some kind of list, registry, or inventory -- usually pursuant to a statutory or regulatory requirement. The number of sites listed by each State in this category are not comparable to one another. Although about 18,000 sites are on these lists, they should not be aggregated because State definitions and approaches vary widely. Many States maintain no formal list or registry. Others vary widely in approach. Some State lists include all known and suspected sites, while others include only a very small number of sites that have completed a long evaluation process. Still others

include only sites where the cleanup is funded by State funds rather than by responsible parties. To illustrate, Connecticut lists only 11 sites on its registry, but, at the same time, has identified 649 sites as needing attention. Conversely, Wisconsin's registry lists 4,000 sites, although only 565 Wisconsin sites need attention. New Jersey has no list, although it has identified 6,500 hazardous substance sites as needing attention.

Some of these State lists have been the subject of litigation brought by parties who objected to their inclusion on the list. For example, in 1992 Illinois was forced by court order to discard its previous priority list. In 1995, the same thing happened to New Jersey. Illinois subsequently reestablished its list. New Jersey is engaged in the same process through rulemaking.

Removal and Remedial Actions

The number of remedial actions and removals undertaken at non-NPL sites within a State present one indicator of the extent of State program activity. In the interest of consistency, ELI asked States to report their activities using the same definitions as used under CERCLA. *Remedial actions* are defined as a removal of hazardous substances from a site and long-term cleanup that includes treatment or containment of contaminated material (soil, water, groundwater); examples include constructing barriers to groundwater movement and incinerating hazardous waste. *Removals* are defined as short-term actions limited to site removal of hazardous substances which pose a health or environmental threat; examples include securing the site, removing hazardous waste containers, and excavating contaminated soils. Many States do not use these definitions when cataloguing their activities at non-NPL sites; some States do not distinguish between removals and remedial actions. The number of sites encompass a wide range of activities including both small actions State departments address and multiple units at one particular site. Accordingly, Table V-4 combines remedial actions and removals in order to reflect the overall activity in each State. Column 1 provides the number of remedial actions and removals underway in a State as of the end of its FY 1995 (usually June 30, 1995); column 2 shows the number of remedial actions and removals completed (defined as completions of remedial construction infrastructure -- although pumping and treating groundwater may be ongoing -- and the receipt of agency sign-off) during the last fiscal year; and column 3 presents the number of remedial actions and removals completed since the start of the State's cleanup program.

At non-NPL sites, New Jersey clearly demonstrates the greatest amount of current site activity, with 9,276 remedial actions and removals currently underway and 12,004 completed since the start of its program, 2,366 of which were completed in the last fiscal year. These figures include a count of operable units within one location.

Although only 10 actions are currently underway, the past performance of Texas' program reveals the same magnitude of activity as New Jersey in that 16,633 actions have been completed since the start of its program, 3,405 in the last fiscal year. It should be noted that Texas tracks spills and cleanups together. During the 1993 study, Texas was reorganizing its program and the cleanup program was only investigating sites; its program started tracking removals in 1992.

Activity in Massachusetts occupies the next lower level of magnitude with 2,356 remedial actions and removals currently underway and 3,462 completed since the start of its program; no data were available for the number completed in the last fiscal year. Massachusetts reported 38 sites completed since the start of the program. Massachusetts, in fact, changed its program in 1993. Actions now include assessments that result in no action determinations and spills. The programs in Michigan and Wisconsin have accomplished a similar amount of cleanup, although their current activity is somewhat less: Michigan has completed 5,028 actions since the start of its program, 1,312 in the last year, and 250 actions are currently underway, while Wisconsin has completed 1,200 response actions since the start of its program (more than double the number reported in 1993), completed 42 actions in the last year, and 130 actions are currently underway.

Alaska, on the other hand, has completed a smaller number of sites, 334 (73 in the last fiscal year), but has 1,216 under way. The next tier of activity consists of 18 States that have completed and/or are working on a few hundred sites, including Connecticut, Vermont, New York, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Minnesota, Ohio, Louisiana, Kansas, Montana, South Dakota, California, Nevada, Oregon, and Washington. The rest of the State programs show past and current activity of fewer than one hundred sites, many of them with fewer than ten sites. Neither Nebraska nor North Dakota have a State cleanup program, so they have no cleanup activity to report. New Hampshire, West Virginia, and Wyoming did not provide figures for any of the requested information.

The figures provided by at least fifteen States for this study do not correlate with the numbers they provided for the 1993 study. For FY 1995, States reported a total of 16,090 actions currently underway and 44,650 completed since the start of the program. For the 1993 study, States reported 11,958 actions currently underway and 16,604 completed since the start of the program. The States reported that 7,960 actions were completed in FY 1995

and that 3,913 were completed in FY 1993. From these figures, it would appear that State activity of hazardous waste cleanup has increased substantially. While activity has increased in some cases, changes in how States answered the questions also may have played a role. In particular, Texas reported completing 16,633 actions since the start of its program, whereas in 1993 it reported having completed only 118 actions. This huge increase in completed actions possibly stems from the State's program reorganization, institution of removals, and combining spills and cleanups together. It is worth noting that Texas spent nearly $29 million on non-NPL sites in 1995, which is consistent with such a large number of actions. Massachusetts provided numbers for the last biennium, which means it completed about 3,500 actions during the last two fiscal years. Overall, the incongruities point out both changes in State programs and inconsistencies in how States track and record actions occurring in their States. When interviewed, some State program staff stated they did not know how the 1993 figures had been tabulated. Since each State defines its actions differently, comparisons cannot be made between State programs simply by contrasting numbers provided on this table. Nor should comparisons be made between different years of a State's activities since many States have altered tracking and/or procedures.

Generally, there are no more than 20 NPL sites completed and/or underway in each State. New Jersey and Washington both have over 100 remedial actions and removals currently going on at NPL sites. In New York, Pennsylvania, and California, over 100 actions at NPL sites have been completed.

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 focus may be on environmental protection, as is the case with the Illinois Environmental Protection Agency, or its duties may be broader, as is the case with the Kansas Department of Health and the Environment. Table V-5 lists the responsible agencies for the 52 States and the divisions (and staffing levels) within these agencies that administer the States' cleanup programs. 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 Special Projects Office in the Office of the Director, Alabama Department of Environmental Management has 20 Full Time Equivalent (FTE) staff working on cleanup activities in four different divisions (three in Management; five in the Engineering Section; eight in Site Assessment; and four in Field Operations). The Minnesota Pollution Control Agency (MPCA), Groundwater and Solid Waste Division has one section dealing with State and federal Superfund sites with a total of 93 FTE staff. The Site Response Section is primarily responsible for and handles hazardous waste sites, the Voluntary Investigation & Cleanup Program, and the Site Assessment and Listing Program. The Hazardous Waste Division handles emergency response and the Minnesota Department of Agriculture handles agricultural chemical sites.

Staffing Levels

The number of personnel devoted to site cleanup varies greatly, from the approximately 650 people in New Jersey's Site Remediation Program, to Wyoming, which does not have a formal superfund program. Program staff levels are indicated in Table V-5. The total number of State personnel working on the State cleanup programs increased slightly from 3,491 in 1993 to 3,585 in 1995. Although the overall change is relatively small, there have been some key changes in staffing levels for individual States. California reported a sharp increase in staffing levels, with 297 FTEs in 1995, 62 more than reported in 1993. Michigan has experienced the most notable decrease in staff, down 83 FTEs to 298 in 1995. Ohio, Wisconsin, and New York also report shrinking numbers of staff members. Although New Jersey has the highest number of FTEs for FY95, its staff has shrunk since 1991, when it had 850 FTE staff members.

Ten States employ more than 100 people working on cleanup activities: Massachusetts, Texas, New Jersey, New York, Pennsylvania, Illinois, Michigan, Ohio, California, and Washington. Six States have staff levels between 51 and 100 people: Connecticut, Florida, Indiana, Tennessee, Minnesota, and Oregon. The bulk of the States, 31, have between 11 and 50 personnel. Only five States (New Hampshire, Arkansas, North Dakota, South Dakota, and Wyoming) have 10 or fewer people assigned to their Superfund programs, down from eight such States in 1993.

Although States were asked specifically to provide the number of FTEs working on non-NPL sites, 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. Moreover, 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	6
11-50	31
0-10	5

Intra-Agency Activities

In a number of States, other divisions within the responsible agency provide support to cleanup personnel. For example, in Massachusetts, 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, scientists in the Department of Environmental Protection's Office of Research and Standards provide risk assessment support at specific sites and in regulation and policy development.

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

Many State agencies with primary responsibility for site cleanup rely on other units of State government for assistance. In Maine, for example, the Department of Environmental Protection (DEP), Bureau of Solid Waste Control, Division of Site Investigation and Remediation has primary responsibility, but the DEP works with the Bureau of Health in conducting risk assessments and lab work. A separate natural resource agency frequently has responsibility for assessment and restoration of natural resource damages. For example, in Minnesota and Michigan, the Department of Natural Resources (DNR) is a separate State agency with jurisdiction over natural resource damages. In California, the Fish and Game Department is the lead trustee for natural resource damage assessment and restoration related to fish, wildlife and their habitats. The Department of Toxic Substances and California EPA are authorized to be trustees for groundwater cases. However, for acute spills and ground spills, the Fish and Game Department is still more likely to be the lead.

Legal Support

Approximately 211 attorneys were reported by the States to be working on waste cleanup issues, a more than 10% decrease from 247 reported in 1993. The numbers for individual States are rather small. Only Massachusetts (22), New Jersey (23), New York (18), Pennsylvania (12), Ohio (11), and California (13) 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, such as Resource Conservation and Recovery Act (RCRA) and general environmental cases.

The State Attorney General's Office (or its equivalent) is the sole source of legal support for the cleanup program in 25 States, while in 16 State agencies the department's own legal personnel provide the sole legal support for State programs. The remaining 10 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 Enforcement Division, and one attorney from its own superfund program staff. Table V-5 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 and compliance 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-6. Since 1993, there has been a reversal in the trend of State use of State general funds versus State cleanup funds. Whereas in 1993 there had been a decrease in the number of States using State general funds for support, in 1995 the number of such States has risen from 27 to 30. Furthermore, whereas in 1993 the number of States using State cleanup funds increased, in 1995 that number decreased from 39 to 36.

All but three States fund their program staffs through a combination of federal grants and State monies. Georgia and Pennsylvania rely solely on State cleanup funds, while North Dakota relies solely on federal funds. State funding is obtained solely through general fund appropriations in 15 States, while 20 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-6), 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 with regard to 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-22 lists the SSCAs, CPCAs and SMOAs between the States and the U.S. Environmental Protection Agency. These data were obtained from U.S. EPA.

E. FUNDING

A State must be able to pay for its activities in cleaning up sites. A readily available source of money is, therefore, an essential element of a State's program to clean up sites. Experience has shown that a fund separated from the operating funds of the environmental agency and continuing from year to year allows the agency to avoid disruptions to cleanups. A fund 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 least some of these expenditures can be replaced through cost recovery actions against RPs that initially did not pay for the cleanup. But money spent at orphan sites, where no RPs can be found, cannot be replenished through cost recovery and must be replenished from other sources. A State may also incur certain expenses that it is not authorized to recover from RPs, including some administrative costs.

A fund also allows a State to control the pace of cleanups; if RPs do not agree to conduct the cleanup, the State will be able to use its own funds to clean up the site without delay. Beyond recovering its costs, the State may be authorized to seek punitive damages from the RPs that refused to conduct or pay for the cleanup. In order for a State to maintain control over when sites are cleaned up, it must have enough money available to pay for cleanup activities as they become necessary. Money should also be available to respond to emergencies and to pay for unexpected expenses, such as for activities at sites where anticipated agreements with RPs are not reached. To be most effective, a fund needs to be large enough to cover these contingencies, including potentially paying for the entire cost of one or more site cleanups. The amount of money necessary to meet these contingencies will vary depending on the number and characteristics of a State's sites, but will also depend on the risk that RPs and the State will not reach agreement at sites for which the State expected

RPs to pay. A fund of adequate size allows a State to control which sites and risks it responds to and how and when that response occurs.

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 promptly recover its costs, then RPs may decide that it is in their interests to agree to conduct future cleanups. States that have demonstrated this ability have been able to reach agreements with 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 some States indicates that completing a remedial action at a single site is likely to cost more than $1M. Thus, for most States, particularly those with multiple sites needing permanent remedies, a fund of more than $1M 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 $1M available, which restricts their response capability. Typically they have only been able to pay for emergency response and removal actions.

Fifty States (including Puerto Rico) 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. Only Nebraska and the District of Columbia have no authorized cleanup funds. This has not changed since 1991. Table V-7 lists the States' funds, their balances as of the end of the State's fiscal year (June 30, 1995 for most States), how much money was added to the fund during the fiscal year, how much was spent from the fund during the fiscal year, and how much was obligated for future work. Not all State cleanup funds or funding mechanisms are listed in Table V-7. 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. Also excluded are funds that may be used solely to clean up spills of oil or petroleum products.

Twenty-one States have more than one fund for cleaning up sites contaminated by hazardous substances. This is a decrease of one since 1993 but is three more than 1991 and is six more than in 1989. States have more than one fund for a variety of reasons. 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 Remedial Action 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 $150K and excess penalties are

deposited in the Remedial Action Trust Fund). States also may have multiple funds because they separate the uses to which their funds may be put. Thus, Ohio has both a 503 (Hazardous Waste Facility Management) Fund, which may be used for emergency response and the State's share of NPL remedial actions (CERCLA match), in addition to its primary RCRA-related purposes, and a 505 (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. Sources of funding for State cleanup programs are listed in Table V-9. These funding sources include appropriations (A in the Table), bonds (B), fees (F), taxes (T), interest (I), penalties (P), transfers from other State funds (TR), cost recovery (CR), private funds (PF), and other (O). The activities for which a State is authorized to use a fund are listed in Table V-10, and include site investigation (SI), emergency response (ER), removals (RM), CERCLA match (CM), studies and design (SD), remedial actions (RA), operation and maintenance (OM), grants to local governments (LG), natural resource restoration (NR), program administration (AD), victim compensation (VC), and other (O).

A key issue for State and federal policymakers is the extent of the States' capabilities to clean up non-NPL (and potentially NPL, or NPL-caliber) sites. The States have identified approximately 30,000 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.

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 provides 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. It also provides a sense of the State's potential to maintain and increase the fund in the future. However, 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 -- Maryland and Wyoming provided no balance information, Florida did not provide a balance for one of its two funds, and Montana provided no balance for three of its four funds.

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. ELI attempted to mitigate this difficulty by asking States how much money was obligated for future work. This information is included in Tables V-7 and V-8.

With these caveats, the total of the balances, including bond authorizations, for all the States' funds is $1.46B, down slightly (4%) from $1.52B in 1993 and continuing the trend of declining total funds available for cleanup since 1990. As has been the case in past years, much of the aggregate fund balance is attributable to large sums of bonds authorized in just a very few States. In 1995, the bonding authority available in three States (Michigan, New Jersey, and New York) totalled $845.6M, which was 58% of the $1.46B total fund balance available to the States at the end of Fiscal Year 1995. The total bonding authority specifically identified by all States was $855.9M (including Maine and California) and the non-bond fund balance total is $609M, an increase of $52.8M from the comparable figure of $556.2M in 1993, when Massachusetts, Michigan, New York, and Wisconsin were the States with outstanding bonding authority. This increase reverses a trend of declining non-bond fund balances since 1990. Since 1989, the aggregate State fund balances including and excluding bond authorizations have been as follows:

Year	Balance including bonds	% Change	Balance excluding bonds	% Change
1989	$2,396.0M		$415.0M	
1990	$2,428.4M	+1.4%	$699.4M	+68.5%
1991	$2,218.5M	-8.6%	$603.7M	-13.7%
1993	$1,523.4M	-31.3%	$556.2M	-7.9%
1995	$1,464.9M	-3.8%	$609.0M	+9.5%

The principal reason for the decline in State balances including bonds is declining amounts of bonding authority available in the few States that have authorized large amounts of bonds. In 1995 five States had bond authorizations totalling $855.9M, compared to $967.2M in 1993, $1614.8M in 1991, $1729.2M in 1990, and $1981M in 1989. As this comparison shows, bond authorizations have been declining since the first 50-State Superfund Study in 1989. 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 York, New Jersey, and Michigan have each issued hundreds of millions of dollars of bonds and spent the money on cleanups since 1989. Massachusetts, Michigan, Wisconsin, Montana, and New Hampshire all appear to have spent virtually all of their initial bond authorizations. New York is the most dramatic example in that the balance in its bond fund has declined from $1.2B in 1989 to $1.06B in 1990, $973M in 1991, $902.7M in 1993, and $594M in 1995. Perhaps more important is that New York staff have noted that they have identified specific sites and projects on which to spend the entire remaining balance in the bond fund and that they expect it to be depleted by the end of Fiscal Year 1997. Furthermore, since 1991 Maine appears to be the only State to have authorized new bonds to be issued, although the New Jersey legislature is considering a bill to authorize $450M in bonds to be used for cleanup. Most of New Jersey's proposed bonds would, however, be earmarked for specific non-superfund related projects, with as little as $75M available for the State cleanup program.

The distribution of fund balances among the States shows a continuing trend away from very small balances, as six States have balances (including bond authorizations) of less than $1M, with two of those (Nebraska and the District of Columbia) having no fund at all, compared to nine in 1993 and 13 in 1991 (this year two States, Maryland and Wyoming, provided no fund information). Twenty-one States have balances from $1M up to $5M (15 in 1993 and 14 in 1991), eight States have balances from $5M to $10M (down from 11 in 1993, but still higher than the 5 in 1991), eight States have balances from $10M to $50M (down from 12 in 1993 and 14 in 1991), and seven States have balances of $50M or more (up from three in 1993 and four in 1991). As was the case in 1993, most States have fund balances from $1M up to $10M – 29 of 50 States reporting balances in 1995 compared to 26 of 50 in 1993. One notable development is that more States than ever before have fund balances of $50M or more, with Indiana, Michigan, California, and Alaska moving into that category in 1995 (though Alaska did not provide a balance in 1993).

The total amount of money in fund balances, however, continues to be concentrated in a few States. The seven States with fund balances (including bonds) exceeding $50M have $1178.07M or 80.4% of the total State superfund balance, compared to $1127.4M (74% of total balance) in three States with balances of $50M or more in 1993, and 84% in 1991. Moreover, the 15 States with fund balances of at least $10M have $1362.51M or 93% of the total available to all States, the same percentage as in 1993. This is a slight decline from prior years when the funds with balances of $10M or more (including bonds) comprised 96% (1991), 97% (1990), and 96% (1989) of the total State fund balance.

Contributions to State funds have varied widely since the first 50-State Study in 1989. Forty-six States (of 50 with funds) added $444.58M to their funds during fiscal year 1995. This is less than half of the $957.3M added to the cleanup funds in 46 States during fiscal year 1993. But it is more than the $381.6M added by 36 States reporting additions in 1991. This year California did not provide information about additions to its funds during the year, which is notable because it added $107M to its Hazardous Waste Control Account in 1993 and $50M in 1991.

Much of the variability in annual infusions to State funds can be attributed to New Jersey, where annual additions in 1995 were $64.7M compared to $350.1M in 1993 and $19.4M in 1991. The variability in New Jersey's additions is largely attributable to changes in the amounts being added to its Bond Fund, which received $8.5M in 1995 compared to $239.5M in 1993 (presumably from the sale of bonds) and $0 in 1991.

Other States have also experienced substantial changes in the amounts added to their funds during different years. Texas went from $20M added in 1991 to $112.3M in 1993 and down to $47.4M in 1995. Similarly, Florida's additions increased from $13.7M in 1991 to $25M in 1993 and then back down to only $1.5M in 1995. California's additions went from $50M in 1991 to $107M in 1993, but then the State provided no information for 1995. On the other hand, Pennsylvania's additions decreased from $89M in 1991 to $45.6M in 1993 and then increased slightly to $51M in 1995. In 1991 Alaska estimated that annual additions could be as much as $50M, then in 1993 it did not report any amount but reported that $15.2M was added in 1995.

As with fund balances, only a few States account for most of the amounts added to State funds, with four adding more than $50M in 1995, compared with five in 1993 and one in 1991. The additions in these four States (New Jersey, Michigan, New York, and Pennsylvania) totalled $229.3M or 51.6% of the total added to State funds by all States. Thus, the aggregate of additions by States is less dominated by the few largest States than in the case of fund balances. In addition, six States reported additions to their funds in the range from $10M to $50M in 1995, one fewer than were in this category in 1993 and 1991. At the other end of the scale, 14 States reported adding less than $1M to their funds in 1995, continuing an upward trend (toward lower additions) in this category from 10 in 1993 and nine in 1991.

Sources of Funds

Table V-9 indicates the sources of funding for State funds and classifies each source as a significant (contributing more than 20% of the Fund's revenues) or minor source. Nine specific types of sources are listed, including appropriations from the legislature, bonds, fees charged for hazardous waste or other activities, taxes, interest on fund or other State investments, penalties or fines, transfers from other funds or accounts, cost recovery, and private funds, plus a final category for other sources.

Eighty-four 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 or funds limited solely to cleaning up contamination from petroleum or its products.

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. Twenty-three States rely on such fees to contribute more than 20% of the revenues for their funds. This is two fewer States having fees as a significant contributor to their funds than in 1993, reversing a trend of slight increases in the number of such States 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 $7.5M. Iowa and Kentucky both suspend fee collection if the fund balance exceeds $6M and resume collection if the fund balance falls below $3M; West Virginia does the same, but the cut-off fund balance is much lower, at $1.5M, and the range is narrower, since fee collection resumes when the balance drops to $1M. Illinois, on the other hand, suspends fee collection when its fund reaches $10M and resumes fee collection when it drops to $3M. The Tennessee legislature imposed even more restrictions on collection of its fees, requiring annual adjustments to maintain a fund balance of $3M - $5M in unobligated funds and limiting the amount of fees collected annually to $1M (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.

Taxes are a significant source of revenue for 17 funds in 15 States, increased from 11 funds in 10 States in 1993. 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 $12M and is reinstated if the balance falls below $5M. Taxes have the potential for raising substantial amounts of money, but may be politically difficult to impose or to raise if revenues do not meet the need. Taxes on

hazardous substances are the primary source of revenue for New Jersey's Spill Compensation Fund (transfer tax) and for New York's Hazardous Waste Remedial Fund.

Bonds provide significant funding for 16 funds in 12 States. In 1986, the New York legislature authorized the State to sell $1.2B in bonds to pay for cleaning up contaminated sites, $100M of which has since been redirected to cleaning up nonhazardous waste landfills. The State began selling the bonds in 1989 and has $594M in bonding authority remaining. This is a substantial reduction in remaining bond authority since 1993 when the bond balance was $902.7M. Although New York's bonding authority is by far the largest, a number of other States also receive large amounts from the sale of bonds. New Jersey's bond fund currently contains $86M after $8.5M was added to it in fiscal year 1995. But over the years New Jersey has generated hundreds of millions of dollars for its cleanup program from the sale of bonds, adding $239.5M to its Bond Fund in 1993, for example. Similarly, Michigan added $62M in bond revenues to its Bond Fund in 1995, which had a balance of $165M at the end of the fiscal year. Other States, like New Hampshire, have exhausted their authority to issue bonds and must look for other sources of revenue for the future. Maine may be the only State since 1991 to have authorized new bonds to be issued, having authorized $4M in bonds for 1996 after authorizing a similar amount in 1995.

Appropriations are also a primary source of funding for State cleanup funds. They provide more than 20% of the funds for 13 funds in 13 States, a decrease from 21 funds in 17 States in 1993, and are a minor source of funding in an additional eight States, which is unchanged from 1993. Some 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. Appropriations are also, naturally, subject to the vagaries of State revenues and politics, reducing their reliability as a continuing source of funds. Even for States where appropriations provide a significant proportion (20%) of the public funding for cleanups, the high percentage typically represents a relatively small amount of money because the fund is small or the additions to it are small. Thus, in only a few States did appropriations provide more than $1M in additions to the fund during fiscal year 1995.

Penalties and fines provide more than 20% of the revenue for 16 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 $1M). Penalties are also minor sources of funding for an additional 21 States.

Fund Expenditures

The amount of money spent by States on cleanups in the past year is another indicator of the financial capabilities of States 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 1995.

Refinements were made to the fund expenditure measure for the 1993 update and retained for this 1995 update. These changes were intended 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. States also were asked to categorize their expenditures and obligations by whether they were for NPL or non-NPL sites.

Most States were able to separate their expenditures from the amounts they obligated, although some States could provide no information for one or more of the categories of information. New Hampshire, Maryland, West Virginia, and Wyoming provided no information on expenditures or obligations and Connecticut and Michigan provided no information about expenditures, but could supply information about obligations. Most States also were able to segregate the amounts they spent or obligated on non-NPL sites from the amounts committed to NPL sites. Unfortunately, the information provided for these sub-categories is more spotty than for total expenditures. Some States do not monitor or record amounts obligated to be spent on specific sites in the future. A number of States that each spent millions of dollars on cleanups did not segregate the amounts spent on non-NPL and NPL sites. These included Alaska, New Jersey (one fund), New York (one fund that spent $49M), Ohio, Oregon, Texas (one fund that spent $28.6M), and Washington (one fund that spent $29M). Nevertheless, it is possible to use the 1993 and 1995 spending data to explore the States' capabilities to clean up non-NPL sites.

In 1995, 44 States reported spending a total of $386.1M and 38 States reported obligating $363.4M to be spent in the future, with some States reporting one figure but not the other. Thirty-seven States also reported spending $203.02M on non-NPL sites and 32 States reported spending $19.57M on NPL sites in 1995, though 12 of the 32 spent $0.

By comparison, in 1993, 46 States reported spending a total of $711.7M and 36 States obligated $459.3M from their funds. In addition, 37 States reported expenditures of $149M on non-NPL sites in 1993 (seven States actually spent $0). A slightly different group of 37 States reported spending $166.3M for NPL sites in 1993, although only two States, Texas and New York, accounted for $144M (87%) of that total.

For 1995, States reported spending only slightly more than one half the total amount reported for 1993 (54%), but the 1995 total reported for spending on non-NPL sites was 36% higher than 1993. The reduction in total spending by the States is largely attributable to substantially lower spending by a few States, including California ($14.4M in 1995 compared to $88.6M in 1993), Texas ($28.6M in 1995 compared to $132M in 1993), and New Jersey ($37.6M in 1995 compared to $188.5M in 1993), which declined by $328.5M in the aggregate. Only New York increased its overall spending by more than $10M, but its $16.5M increase (15% more than 1993) was small compared to the decreased spending in New Jersey, Texas and California.

As in 1993, most States (31 of 44 reporting) spent less than $5M on all sites in 1995, and a substantial number of those (15) spent less than $1M. In addition, five States spent at least $5M but less than $10M, six States spent at least $10M but less than $50M, and two States spent $50M or more, with only New York spending more than $100M. In 1993, 20

States spent less than $1M, nine States spent at least $1M but less than $5M, five States spent at least $5M but less than $10M, six States spent at least $10M but less than $50M, and four States spent more than $50M, with three spending more than $100M.

In contrast to the substantial decrease in overall spending, the reported spending on non-NPL sites rose by 36% from $148.96M in 1993 to $203.02M in 1995. This change also may be explained by substantial changes in a few States. In 1993, New Jersey did not report how its total spending had been allocated between non-NPL and NPL sites, but in 1995 it reported that virtually all (98%) of its $29.6M expenditures went to non-NPL sites. In addition, New York reversed its spending from primarily NPL sites in 1993 ($59.8M compared to $1.1M for non-NPL sites) to virtually entirely non-NPL sites in 1995 ($79.4M compared to $0.1M on NPL sites). These shifts to spending on non-NPL sites were somewhat offset, however, by a change in reporting by Texas, which spent $47.8M on non-NPL sites in 1993 but did not provide a breakdown for NPL versus non-NPL spending in 1995.

As is the case with fund balances, the majority of the total spent by States on non-NPL sites is accounted for by a few States. Three States account for 66% ($133.5M) of the total spent by the States on non-NPL sites in 1995: New York spent $79.4M on non-NPL sites (39% of total State spending); New Jersey spent $29.04M; and Washington spent $25.05M. At the other end of the scale, 16 States reported spending less than $1M, and seven of those spent less than $100K, on non-NPL sites.

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. For example, Pennsylvania continues to add more to its fund ($51M) than the total of its expenditures and obligations ($39M) and its balance continues to grow (from $21.8M in 1991 to $60.5M in 1993 to $75M in 1995) indicating that the State is expanding its capacity, presumably in anticipation of paying for more expensive remedial actions. Other States whose additions substantially exceeded their expenditures and obligations included Georgia ($11.5M added in 1995, expenditures and obligations of $7.4M, balance rose from $8.3M in 1993 to $13M in 1995), Indiana (balance in HSRTF rose from $9.8M in 1993 to $27.5M in 1995, with expenditures and obligations of $2.49M in 1995 but additions not reported), and Ohio (505 remedial action fund had $25.4M in additions, $12.8M spent and obligated, and balance remaining stable ($13.3M in 1993 and $13.8M in 1995)).

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 ($89M initially) from which it has funded its program since the late 1980s. But the State added no money to the bond fund in 1991, 1993, or 1995, so the balance has been steadily declining. Thus, with obligations exceeding $10M and the bond fund balance now down to $2.5M (compared to $22M in 1993), it appears that the State must find other sources of funds just to complete the work to which it is already committed.

Other States that also appear to be spending down their fund balances include: Connecticut (balance declined from $21.78M in 1993 to $10.58M in 1995, additions exceeding obligations by only $1M), New Jersey (1993 balance of $161.5 declined to $136.7M in 1995, expenditures and obligations of $100.1M exceed additions of $64.7M), New York (balance of

$599.1M is $306.3M less than 1993, expenditures and obligations of $252.9M exceed additions of $51.6M), Kentucky (balance declined from $5M in 1993 to $1.77M in 1995, and expenditures and obligations of $4M exceed additions of $2.78M), and Washington (balance declined from $46.3M in 1993 to $28.5M in 1995, and expenditures and obligations of $73M exceed additions of $46.5M).

Uses of Funds

Table V-10 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), victim compensation (VC), and Other (O).

Emergency response and removals continue to be the most widely authorized uses of States' funds. 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 Colorado is not authorized to pay for emergency responses; only Virginia and Wyoming may not pay for removals. Although virtually all States remain authorized to spend fund moneys on these short-term actions, there were changes in a few States: Connecticut now reports being authorized to use its funds for emergency response; Virginia reports it is no longer authorized to use its fund for removals while Colorado is now able to fund removals.

The vast majority of States also may use their funds to pay for remedial actions, or more permanent cleanups. Only Mississippi, Oklahoma, Colorado, Utah, Wyoming and Idaho, of the States with funds, may not use the money to pay for remedial actions. Interestingly, all of these States, with the exception of Wyoming (which did not provided financial information), have fund balances exceeding $1M, and thus likely would have sufficient resources to pay for a cleanup at a non-NPL site. Also notable is that, except for Mississippi, these are all western States.

Most States also may use their funds to pay for other activities that support the primary functions of emergency response and short- and long-term cleanup. These include studies and design (44 States, no change from 1993), operation and maintenance (41 States, 2 more than 1993), and program administration (40 States, 2 more than 1993). Most States (43, 2 fewer than 1993) also are authorized to use their funds to pay the required State share of remedial actions at NPL sites.

Other uses are far less common. Only 15 States may use their funds to pay for restoration of natural resources that may have been damaged by releases of hazardous substances. This does not mean that other States are not authorized to restore natural resources. A number of States do so under other programs, particularly through separate natural resource management agencies. Only 4 States, Rhode Island, Vermont, New Jersey,

and Minnesota, report being authorized to use their funds to compensate victims harmed by releases of hazardous substances.

The primary purpose of some States' funds is not cleanup of sites contaminated by hazardous substances. Ohio's '503 Fund,' for example, is primarily used to pay for the agency's hazardous waste management activities, including responding to emergencies involving hazardous wastes. 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 $2M 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.

Some States that have funds authorized to be used for cleanup activities are limited in practice by very low funding levels. North Dakota's fund balance was only $129K and it received no new money for the fund in 1995. It is not surprising then that it spent no money on cleanup activities -- it had no real financial capability to do so. Alabama's financial situation was only slightly better, as its fund balance was $478K but a comparable amount was added to its fund during the year and it was able to spend $324K on non-NPL sites during the year. The low levels of funds available in these States restricts them to small-scale actions, such as emergency removals of drums.

Some States, on the other hand, spent very little on cleaning up non-NPL sites even though they had money available. North Carolina, with a total fund balance of $7.8M, had perhaps the largest discrepancy between apparent financial capability and spending, since it spent less than $54K on non-NPL sites. Virginia, Louisiana, New Mexico, Oklahoma, Iowa, South Dakota, Utah, and Idaho all had fund balances exceeding $1M (only Utah's balance exceeded $5M), but spent less than $200K on non-NPL sites. Georgia, on the other hand, has moved out of this category, as it had a Fund balance of $13M at the end of fiscal year 1995, spent $2.5M and obligated another $4.9M.

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 $30K.

In six States, the agency must obtain prior legislative approval for some types of expenditures. Washington requires that <u>any</u> expenditure from its State or Local Toxic Control Account first be appropriated by statute. Oklahoma requires a site-specific appropriation whenever site costs are expected to exceed $1M; Illinois must get a similar appropriation if site expenditures will exceed $1M for a single incident. According to Illinois program officials, this cap has not affected the program's effectiveness. In Vermont, non-emergency expenditures over $50K 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. 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-11 indicates a number of criteria, including promulgated cleanup standards, water quality criteria, maximum contaminant levels (MCLs) or maximum contaminant level goals (MCLGs), background levels, risk assessment, EPA guidelines, groundwater standards and soil standards that are used by States to determine cleanup levels at hazardous sites. Since 1993, a substantial increase in the total number of criteria used by States is noticeable.

Forty-three States, an increase of nine since 1993, report the use of EPA guidelines for cleanup standard selection. A total of 50 States apply MCLs or MCLGs when relevant. Forty-nine States, up by six since 1993, apply water quality criteria. Forty-three States report the use of background levels to determine cleanup levels. Twenty-four States, an increase of five, report having promulgated standards used to determine cleanup levels. In all, 45 States employ the use of health-based risk assessment. The majority of these States use carcinogenic risk levels of 10^{-4} to 10^{-6} and a Hazard Index ≤ 1. Thirty-seven States report the use of groundwater standards and 27 use soil standards for determining cleanup levels. The District of Columbia, Delaware, Massachusetts, New Jersey, Puerto Rico, and South Dakota report the use of all eight listed criteria in determining their cleanup levels and policies.

At least two States in particular report an increase in the number of criteria employed in establishing cleanup levels since surveyed in 1993. Idaho reported using only EPA guidelines in 1993. In 1995, water quality criteria, MCLs/MCLGs, risk assessment and groundwater standards are all applied in determining cleanup levels. North Carolina now uses promulgated standards, MCLs/MCLGs, background levels, and groundwater standards, in addition to the water quality criteria, risk assessment, and EPA guidelines reported in 1993. Similarly, the District of Columbia, in addition to applying EPA standards, now reports using promulgated standards, water quality criteria, MCLs/MCLGs, background levels, risk assessment, groundwater standards and soil standards.

In most States, cleanup determinations are made on a case-by-case or site specific basis. States use different methods to establish standards. New Mexico sets cleanup standards through a public hearing process. Several States, including Utah, Montana, and Minnesota, use an ARAR process similar to the CERCLA process, while Arizona incorporates health-based guidance levels (HBGL) which 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. Illinois' cleanup levels are based on a risk-based tiered approach for the protection of groundwater, and the protection of human health from

other exposures. Illinois' 1995 amendments establish a risk-based system that considers present and future land use. Three tiers of risk-based remeditation activities will be established by regulation.

Since 1994, California has been using CalTOX, a multimedia, multiple pathway risk assessment model that is implemented in a computer spreadsheet. CalTOX relates the concentration of chemicals in the soil to the risk of an adverse health effect for a person living or working on or near the contaminated soil. This permits computation of health-based soil remediation levels given target risk levels or assessment of human health risk given soil concentrations. CalTOX is available for other States to use. Oklaholma also recently introduced a computer-based model to determine soil cleanup levels.

In determining cleanup levels, States most often take into consideration public health and welfare, environmental harm, and the cost effectiveness of cleanup procedures. Several States have adopted two sets of risk levels which depend on the intended use of the remediated site. Alabama, Oregon, and Washington differentiate between industrial sites, which use risk levels of 10^{-4}, and residential sites, at which levels of 10^{-6} are targeted. Oregon, for example, has adopted numeric standards for soil cleanup of 76 compounds at "simple" sites. These soil cleanup standards allow greater residual contamination in industrial zones. Michigan's new cleanup program focuses on land-use-based cleanup criteria for residential, commercial, and industrial uses. This tiered system starts with established numerical standards for identified contaminants or allows site-specific risk assessments to determine cleanup levels. Site-specific institutional controls may be used to achieve the public health risk goal.

Some States are currently revising their cleanup standards and criteria. Others, including Vermont, are in the process of developing procedures for determining applicable cleanup standards on a site-specific basis.

The information provided by the States on cleanup policies and criteria indicates a widespread maturing of State cleanup programs, as evidenced by the nearly universal adoption of MCLs, risk assessment, and water quality criteria as cleanup standards. In addition, there seems to be a consensus developing that risk assessment should consider both cancer and non-cancer risks and that the goals should be 10^{-4} to 10^{-6} for carcinogens and a Hazard Index ≤ 1 for non-carcinogens. That 24 States report having promulgated standards used to determine cleanup standards further indicates a maturing of cleanup programs. The data for 1995 demonstrates that States are beginning to achieve sufficient experience to be able to articulate consistent rules, principles and processes for site cleanup.

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-12 describes formal and *ad hoc* public participation requirements for each State.

There has been a slight increase in the States' public participation requirements since 1993. Almost every State now reports some sort of public participation requirements or policy, increased from 45 in 1993 to 51 in 1995. A total of 37 States have statutory or regulatory requirements for public participation, up from 24 in 1993. Another 14 States solicit public participation strictly as a matter of policy or on an *ad hoc* basis.

Some States follow the public participation guidelines contained in the National Contingency Plan (NCP) through incorporation in State statute or regulation, or as a matter of policy. The NCP guidelines are the primary source of public participation practices for all sites in thirteen States: Alaska, Colorado, Idaho, Illinois, Indiana, Kansas, New Jersey, New Mexico, Ohio, Oklahoma, Puerto Rico, Utah, and Virginia.

Only Kansas reported the development of new public participation regulations relating to requiring community participation guidelines in contingency plans.

States that have voluntary remediation programs often have public participation requirements that 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. Other States have specific requirements for voluntary remediation programs. For example, Maryland requires a Community Relations Coordinator and Montana has a new requirement for notice and comment on proposed voluntary plans. Some States, for example, North Carolina, reduce public participation requirements in the case of voluntary remediation. Still other States, such as Virginia, waive all public participation requirements.

Public Notice Requirements

One of the most important and common public participation practices is notification of the public at important times during the site handling process. A total of 45 States report that they provide public notice at some point during site handling. Thirty States have statutory or regulatory provisions for public notice. Fifteen 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. Some States require notice of other events as well, such as proposed consent decrees (Delaware, Montana, Washington); settlement agreement revisions (Delaware, Oregon); administrative orders (Montana); compliance orders, enforcement orders, and notices of violation (Washington); corrective actions (Vermont); emergency orders (Mississippi); State enforced cleanups (North Carolina); remedy selection (Texas);

applications for certain permits for response actions (Massachusetts); and voluntary remedial action plans (North Carolina).

In general, notice is required to the public, but some States also require notice to specific groups. For example, Connecticut, Massachusetts, Mississippi, Montana, New Hampshire, and North Dakota require notice to local government officials. Other States require notice to those most likely to be affected by the site listing or remedial action. For example, Vermont requires notice to municipalities when the sites are within their borders, while New York requires notice to adjacent property owners and town and county clerks concerning site registry changes. In North Carolina, under the requirements concerning voluntary remedial action plans, notice is given to those who request to be on a mailing list. In New York, contact lists of interested persons are developed under public participation plans and these contact lists are used for notice.

The States also have a variety of methods of notifying the public. New York uses mass mailings for this purpose, while Mississippi uses direct mailings. Some States, including Alabama, Missouri, Nebraska, and North Carolina place announcements in local newspapers and on radio.

Public Comments

A total of 44 States solicit comments from the public during the site handling process. Thirty States have statutory provisions for public comments. Fourteen 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.

A standard comment period of between 30 and 90 days applies in some States, including Alabama, Arizona, Nebraska, New York, Oregon, Pennsylvania, and Wisconsin. In most States, comments are solicited on proposed remedial action plans, but occasionally also on other decisions, such as whether to list a site. For example, Louisiana requires that settlement agreements be available for comment.

Public Meetings/Hearings

A total of 45 States have provisions for public meetings or hearings during the site handling process. Twenty-five States have statutory requirements for meetings or hearings. Twenty 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.

The impetus for holding public meetings differ from State to State. In some States, like California, Kentucky, Ohio, and Pennsylvania, public meetings or hearings during the site handling process are required or, at least, standard practice. In other States, including Arizona and North Carolina, meetings are discretionary. Kansas requires public meetings when contamination migrates beyond property boundaries; while meetings for on-site

contamination are optional. Oregon and Wisconsin hold meetings upon citizen petition. Montana holds meetings at the request of local government officials.

Examples of proposed events and decisions which can require public meetings are consent decrees (Washington), enforcement cleanups (North Carolina, New Hampshire), major cleanup milestones (Arkansas), proposed remedial actions (Oregon, California, Louisiana, Mississippi), update of the State priority list (Michigan), and after the RI/FS to explain the proposed plan and ROD (Tennessee, Minnesota).

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.

Document Availability

In addition to providing public notice, many States make information available to the public in more passive ways. A total of 45 States have provisions for document availability during the site handling process. Thirty-four States have statutory or regulatory requirements for document availability. Twelve States have discretion to make documents available as a matter of policy.

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 maintained by local governments and made available to the public. Wisconsin makes its files available to the public with limited confidentiality. Nebraska requires that proposed remedial action plans be placed in local libraries. Public education programs are implemented in Hawaii and Nevada.

Grants

A few States provide grants for public participation. Massachusetts, Pennsylvania, and Washington have statutory provisions for grant-making, while Kentucky and Oklahoma may issue grants as a matter of policy. For example, Massachusetts may give technical assistance grants to assist in public participation, similar to the federal Technical Assistance Grants under CERCLA. Washington is authorized to give grants to affected persons or to non-profit public interest organizations to assist with participation.

Some States provide more informal assistance. Iowa, for example, provides technical assistance to local governments and citizens for the purpose of participating in the cleanup process at a particular site.

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, a spokesperson 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. Kansas includes guidelines on community participation in its contingency plan. Louisiana prepares community relations programs at complex sites, which include provisions for public meetings and fact sheets. Fact sheets, as a public communication tool, are used in Minnesota, Illinois, and Connecticut. Maryland requires that consent orders include a community involvement section. Massachusetts prepares a public involvement plan upon the petition of at least 10 citizens, which is to be implemented by the person conducting the response action. New York has a statutory requirement for citizen participation programs to be developed by the Department of Environmental Conservation at the start of the 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. Washington requires early planning and development of a site-specific public participation plan.

Public Relations Coordinators

A number of States indicate that they assign public relations personnel to their cleanup sites, in general as need requires, especially for areas where the citizenry is interested or where the case is complex and of public interest. Only Minnesota assigns each site a public information officer by policy. In most States, use of a community relations coordinator is discretionary. For example, Pennsylvania and Illinois assign community relations coordinators on an *ad hoc* basis, based on local need; Louisiana assigns a community relations coordinator for complex sites; and Maryland uses public relations personnel for sites where there is a consent order. The purpose of the coordinator is usually to emphasize direct contact with interested members of the public in small groups or one-to-one situations.

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.

Advisory groups can be established State institutions. For example, 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. The Alaska legislature has established a Citizens' Oversight Council on Oil and Hazardous Substances. Washington makes use of regional citizen advisory committees established by the State Department of Ecology.

In addition, some State cleanup programs provide for the use of citizen advisory panels under certain circumstances. For example, Nevada provides for *ad hoc* use of citizen advisory groups. Colorado makes increasing use of technical and non-technical advisory groups for input on decisions and future land uses. Minnesota consults with community action groups. Alaska usually establishes a citizen advisory panel for major cleanups, while Wyoming uses citizen committees at significant sites. Utah has a policy of establishing a citizen advisory panel for large voluntary agreements.

H. ENFORCEMENT

State hazardous substance cleanup laws frequently contain enforcement provisions. Enforcement authorities under State laws vary significantly. Many of the States with cleanup fund laws have enforcement provisions in those laws; many of these provisions are similar to those in the federal CERCLA. However, other States rely for enforcement on their general environmental laws, hazardous and solid waste laws, groundwater laws, and other provisions. See Table V-2. For example, 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 to conduct enforcement. See Chapter VI.

Liability

Who is Liable?

The most important issue in enforcement is determining who can be charged with liability for cleanup of hazardous substances. Most of the State statutes have followed the federal lead by making a wide spectrum of actors "responsible parties." The majority of State liability standards provide a means to reach the same parties that CERCLA does -- owners, operators, generators, transporters, etc.

A few States have more difficulty reaching beyond owners and operators of disposal sites. For example, States that rely on RCRA-type authorities for enforcement generally must show a RCRA violation or, at least, RCRA jurisdiction over the actor or the site at the time that the disposal occurred. However, even in these States, solid waste laws or imminent danger provisions can provide a longer reach. Because most States also have a general provision prohibiting pollution of "waters of the State," even those States without CERCLA-type authority can at least arguably reach generators or transporters that have placed hazardous material where it has entered groundwater.

Retroactivity

A new issue covered in this study is the "retroactivity" of the liability imposed by State cleanup statutes. This has become a topic of concern in the Congress as reauthorization of CERCLA is debated. CERCLA imposes liability for disposal and other actions that occurred prior to the date CERCLA was enacted.

In order to avoid any confusion of State liability with federal liability standards, ELI asked a precise question: "Can your State program impose liability *under State law* for cleanup of hazardous substances disposed of before the date the program was enacted?" 43 States impose retroactive liability (Table V-13).

Only the District of Columbia, Virginia, West Virginia, Nebraska, Colorado, Utah, Wyoming, California, and Idaho cannot impose retroactive liability using State cleanup laws. Colorado and California have aggressively used the federal law on such sites.

Liability Standards

In most cases, liability standards are subject to interpretation by State courts, based on the statutory language, statutory structure, and the common law legal arguments advanced by the State. In a number of States, the liability standard has never been tested in court. In general, however, this study shows that the vast majority of liability schemes under State programs (34) have followed the federal model of "strict, joint and several" liability, which was itself borrowed from New Jersey.

It should be noted that this study and its prior updates have reflected changes in the liability standards where statutory language is subject to more than one interpretation. The study methodology, consistent since the original 1989 study, uses the information about liability standards provided by the States themselves, with ELI's own verification against the statutory language to assure that the States' asserted standards were consistent with the language of their statutes. Thus, for example, New York in 1993 and currently is shown as having a standard of "strict, joint and several" rather than "other" as in the 1991 and previous reports. This is based on New York regulations adopted in 1992 that clarified the State's interpretation of its law. Ohio's standard is now shown as "strict, joint and several", rather than as "not specified" as in the 1993 update, because of its Attorney General's interpretation of the statute which is silent on the standard.

Standards of liability in all of the States involve two questions. These two questions must be answered separately in order to understand a liability scheme. Unfortunately, they are often confused in public discussion.

The first question is whether any showing of fault is required in order to render a party liable. In other words, is liability strict -- based solely on the occurrence of a release -- or does it require proof of fault, such as reckless or negligent handling? This is the *culpability* standard.

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 how

liability is to be allocated. Is liability joint and several, proportional, or some combination of both? This is the *allocation* standard.

State Culpability Standards

Strict liability is the most frequently used culpability standard in State cleanup programs. Strict liability means that the enforcement agency does not need to prove that the responsible party committed a negligent, reckless, or intentionally wrongful act. Rather, it must show simply that the party contributed to a release of hazardous substances. With strict liability, a responsible party who has contributed to hazardous conditions at a site is liable for cleanup costs based simply upon the occurrence of a release, without proof of fault.

Liability standards other than strict require the State to satisfy a higher burden of proof -- such as proof of negligence or willful intent by a responsible party. This, in turn, requires the State to spend more resources investigating the past intent of parties involved in a particular site. Liability 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-one States have strict liability standards (Table V-13). One of these States is Wisconsin, which has two cleanup statutes -- one with strict liability and one without. The remaining States either do not specify liability standards, lack an enforcement statute, or require proof of fault (e.g., Virginia, where the State must show that waste has been "improperly managed.")

State Allocation Standards

Most hazardous substance sites have more than one potentially responsible party. These may include site owners and operators, the generators of the hazardous substances, the transporters of the hazardous substances, and various arrangers and disposers. Absent a statutory prescription of an allocation standard, joint and several liability is the normal common-law method of assigning costs among responsible parties where more than one party causes harm. It is used in the federal CERCLA program. The joint and several liability standard means that each company that contributed in any way to the presence or release of hazardous substances is held responsible for the *entire* liability unless it can show that its contribution to the harm was distinct and divisible.

Joint and several liability enables a government to sue one or more of the responsible parties for the full amount of the cleanup, and leave it to them either to prove that their share is divisible or to pay the government the full amount and then seek to recover contributory shares from other responsible parties. Joint and several liability has been a cornerstone of the federal program and many State programs because it allows the government to commence enforcement or cleanup before all information on the history of the site is available. It also conserves governmental funds by placing the burden of allocating costs on the private

parties responsible for the contamination. Joint and several liability does not generally result in a single party bearing all of the costs. Instead, it generally promotes the formation of committees among the responsible parties to attempt to work out their shares among themselves.

In contrast, proportional liability requires the government to allocate liability in shares among the responsible parties by proving their proportional responsibility (which may be determined in a variety of ways). In addition, the government must pick up the tab for any defunct organizations that contributed to the hazardous substances released. A few State laws use proportional liability schemes, and some States use a hybrid approach.

Like the federal government, 37 States use joint and several liability as the allocation standard (Table V-13); of these, all but Oklahoma, North Dakota, and Wyoming are also strict liability States. Six of the 37 joint and several liability States specifically allow responsible parties an opportunity to prove a divisible apportionment (Arkansas, Louisiana, Maryland, North Dakota, Texas, and Vermont). In these States, while liability begins with a joint and several presumption, the opportunity to prove a divisible share is afforded. The standard for divisibility is usually more generous than that under the common law. Two other States of the 37 provide for proportionality in very limited circumstances. Wisconsin uses joint and several liability except in cases where the site is owned or operated by a municipality; in these instances, apportionment is used. Montana's law provides for joint and several liability in determining liability to the State, but allows the court to apportion liability among the responsible parties in the same proceeding after the State has been allowed to fully recover under the joint and several liability standard.

Only five States have laws that specify proportional liability as the applicable standard (Alabama, California, Illinois, Tennessee, and Utah). Illinois repealed its former strict, joint and several liability standard in 1995 and enacted a fault-based, proportional liability scheme. No standards for allocating liability are specified in 10 States. States where there is no allocation standard may be able to avail themselves of joint and several liability as a common law doctrine.

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 types of cleanup orders. While one type is not subject to pre-enforcement review, the other may be appealed administratively to the Commonwealth's environmental hearing board. In Texas, a cleanup order may be appealed to State court. Other States, such as Tennessee and Oregon, do not allow pre-enforcement review of cleanup orders. In a significant number of States, the availability of pre-enforcement review has not been determined because all sites have been handled by consent order or voluntary agreement.

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

Recovery of punitive damages is provided in 25 States (Table V-14). Recovery of treble damages is authorized in 22 States; one State authorizes double damages; and two States authorize recovery of 1½ times remediation costs as damages. Louisiana's statute has two standards. It provides for the recovery of treble damages by the State from non-cooperating responsible parties, but it also provides that participating PRPs can recover double damages from non-participating PRPs, thus giving a stronger incentive to PRPs to participate in settlements.

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 their hazardous waste laws, water pollution laws, and solid waste laws rather than on State superfund laws for this purpose. Moreover, in practice, penalties have not been highly important in securing cleanup actions. The potential to perform State-funded 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 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. Twenty-eight States have independent authority under State laws to recover NRDs for hazardous substance sites (See Table V-15). Both these and other States have actively sought to recover NRDs under federal CERCLA authority (See Table V-16). In ascertaining the level of NRD authority and activity, this study has attempted to exclude authorities and actions related solely to cleanup of petroleum-related spills.

Only eight States reported having recovered NRDs under State law for contaminated sites. Seven States reported having such claims currently pending under State law. The latter group includes three States that have not previously recovered such damages.

Thirteen States reported having recovered NRDs under CERCLA. Eleven have federal CERCLA NRD claims pending. (Table V-16). Colorado built much of its early State cleanup program around federal CERCLA NRD claims. Other States are beginning to make greater use of these authorities, particularly as the federal program matures.

This study also examined the status of actual restoration activities conducted with NRD awards, although not enough information was received from the States to construct a table. With only partial responses from the States, the following information was determined: States reported at least 33 restoration activities underway using recovered NRDs, and at least 27 restoration activities entirely completed with such funds. Although dollar amounts were not available for all of the actions reported, nearly $70M in natural resource restoration expenditures were noted.

Property Transfer Provisions

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." Most property transfer provisions impose duties on land owners to disclose the presence of

hazardous substances on a site; others require site investigations, and deed recordations; some even require site cleanup as a condition of the transfer.

An increasing number of States have adopted property transfer provisions; 25 States report that they have property transfer provisions, up from 23 in 1993 and 18 in 1991 (Table V-17). States that simply maintain a database of contaminated sites are also shown on Table V-17, but are not counted in this total unless they also have some other property transfer provisions. States that have property transfer provisions only in their voluntary cleanup programs (such as Ohio and Wisconsin) are also not included in this total.

Seventeen 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 hazardous waste conveyors, and treatment, storage, or disposal sites. Deed recordation is required in Ohio only where a voluntary cleanup results in less than full removal of the hazardous substances. 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 believe 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. A 1995 New Jersey law requires real estate brokers to disclose to purchasers of new homes the availability of a list of certain off-site environmental conditions

that may affect the value of the property; the list is to be maintained by municipal clerks and includes federal Superfund sites and New Jersey contaminated sites among other properties.

The Illinois Responsible Property Transfer Act requires that the transferor provide environmental disclosure documents to both the transferee and lender. 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 transferee 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 wave of disclosure laws that followed, but was one of only two to mandate cleanup as well as disclosure. 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 direct conveyances of real property; ISRA also applies 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 database or databases to assist purchasers and other parties to transactions in conducting environmental due diligence to determine whether sites have been contaminated.

Superliens

Although not shown on a table, the study also assessed the use of superliens for the recovery of State funds spent on site cleanup. A lien is a legal claim against the title of the property that often comes into play at the time of a transfer, because it makes property transfers more difficult, or requires 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.

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.

Chapter IV

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Voluntary Remediation Programs

A. VOLUNTARY CLEANUP PROGRAMS

Voluntary cleanup programs provide States with an additional tool to address the 28,997 sites identified as needing attention, as well as sites that have not yet been identified. These programs often provide incentives for private parties to take part and reduce States' oversight burden. This allows States to concentrate their efforts, and leads to more sites being addressed in less time.

Tables V-18 and V-19 provide detailed information on State voluntary cleanup programs. Table V-18 outlines when the States' programs were established, what types of authority these programs have, the citation for that authority, and the relationship of the voluntary program to the State CERCLA-type cleanup program. Table V-19 describes eligibility requirements, program incentives, and funding information.

Thirty-one States have established voluntary cleanup programs. Sixteen States (Alabama, California, Colorado, Connecticut, Delaware, Missouri, Montana, Nebraska, Nevada, New York, Ohio, Pennsylvania, Tennessee, Texas, Wisconsin, and Virginia) have started formal programs since 1993. In addition, implementation of recently passed voluntary cleanup legislation in Louisiana is pending, and development of a voluntary cleanup policy is underway in Arkansas. Several other States regularly negotiate private party cleanups on a site-by-site basis without a formal voluntary program. Every State in Region V has a voluntary program, as do the bulk of States in Regions I and II, and at least half the States in every other Region.

Authority

States derive authority for their voluntary cleanup programs in four ways: specific statutory authority; the general authority of the State's hazardous waste laws; regulation; and guidance or policy. In practice, this ranges from Alabama, which is finalizing a voluntary cleanup policy under its general program authority, to Minnesota, which has had specific statutory authority for its program since 1988.

Twenty-two States either have specific statutory authority for their programs, or use general cleanup authority to establish their programs. Three States (Washington, Rhode Island, New Jersey) derive their authority from regulations, while five States (New York, South Carolina, California, Nevada, Oregon) have established their programs through policy.

Administration

In 19 States, the voluntary cleanup programs are integral components of the general hazardous site cleanup programs. Seven States separate their general cleanup programs from their CERCLA-type cleanup programs. In Colorado, Nebraska, and Nevada, the voluntary cleanup program is the only cleanup program for hazardous substance sites. In Alabama, the program is a multi-program effort of the CERCLA, RCRA, and Groundwater offices. In Oregon, the program complements its orphan-site and enforcement programs.

Eligibility

There are two approaches to defining eligibility: by the site, and by the nature of the private party. Twenty-one States determine eligibility by the person or entity applying to participate in the program. Ten States (Arizona, Maine, Michigan, Minnesota, Montana, Nebraska, New Jersey, Oregon, Rhode Island, and Texas) allow anyone to participate, while 10 States (Connecticut, Massachusetts, Nevada, New York, North Carolina, Oklahoma, South Carolina, Utah, Washington, and Wisconsin) limit eligibility to owners of the property, potential purchasers, or potentially responsible parties. Indiana only allows persons or entities who are not under a pending enforcement action or emergency condition to participate. Interestingly, New York and Connecticut specifically mention that municipalities are eligible to participate.

Twelve States determine eligibility by the type of site to be remediated. Delaware and Pennsylvania allow all sites into the program. Seven States (Alabama, Colorado, Illinois, Indiana, Missouri, Ohio, and Virginia), however, do not allow sites into their programs that fall under the jurisdiction of, or are subject to enforcement actions under, other federal or State environmental statutes. For example, Virginia allows all sites where remediation is not mandated pursuant to CERCLA, RCRA (Subtitle C, D, or I), the Virginia Waste Management Act, or the Virginia Water Control Law. In California and Massachusetts, only sites that fall below a certain threat level are eligible for remediation under the voluntary cleanup programs.

Connecticut and Texas consider both types of eligibility criteria. In Texas, anyone may apply to enter the program, but only sites not subject to a permit or order are eligible for remediation under this program.

Incentives

Given federal and State hazardous waste laws, private parties have few incentives to voluntarily remediate hazardous substance sites. Moreover, several disincentives exist, such as liability, lack of control over the remediation process, and cost. In order to create a more favorable climate for voluntary cleanups, States have attempted to lessen or eliminate the disincentives.

In order to address the questions of liability and State enforcement actions, 20 States offer some form of legal assurance to participants. Seven States (Delaware, Minnesota, New York, Pennsylvania, Tennessee, Texas, and Wisconsin) waive liability to one degree or another. Four States (Arizona, Indiana, Massachusetts, and Rhode Island) employ covenants not to sue. Three States (Nevada, Texas, and Virginia) certify that no enforcement actions will be taken against the site. In all cases, however, participants are still federally liable under CERCLA or RCRA, and may still be subject to federal enforcement actions. Additionally, most of these States include "reopening" provisions in the agreements that allow for State action if further contamination is discovered.

Nine States (Colorado, Delaware, Michigan, Montana, Nebraska, New Jersey, Oregon, Texas, and Utah) issue no further action letters. These letters signify that, according to the State, no further remediation is required at the site, and most States then remove the site from their priority list. Indiana, Maine, and Virginia issue "Certificates of Completion." In Virginia, it is the awarding of these certificate that confers the waiver of liability.

Four States (Connecticut, Illinois, Texas, and Washington) must be responsive to participants' schedules and deadlines. California, Massachusetts, and Ohio authorize less State oversight and/or more participant control over the remediation process.

Six States offer financial incentives to entice potential participants. Minnesota, Ohio, and Pennsylvania provide loans, usually disbursed through State commerce departments, for site assessment. Ohio also provides tax credits to program participants. Arizona and Tennessee pay for any orphan shares at a site. In addition, North Carolina places a $3M cost cap for participants on remedial actions.

North Carolina and Oklahoma will not submit any sites in their voluntary cleanup programs for inclusion on the NPL. California, Michigan, and Tennessee either do not place their voluntary cleanup sites on their State lists, or remove them from those lists.

Minnesota and Oregon provide participants with technical assistance in the form of guidance documents and staff review.

Funding

Voluntary cleanup programs rarely use State cleanup funds to finance State oversight. For the most part, States ask the participants to reimburse them for oversight costs, either directly or in the form of a fee.

Fourteen States (Colorado, Connecticut, Indiana, Maine, Massachusetts, Missouri, Nebraska, New Jersey, Ohio, Pennsylvania, Tennessee, Texas, Virginia, and Washington) charge a prescribed fee for participation in the program. Virginia and Washington base the fee on a percentage of the remediation cost, placing a cap on the fees at $5K and $15K respectively. Pennsylvania has the lowest set fee at $250, while Nebraska has the highest set fees with a $5K application fee and a $5K participation fee.

Thirteen States, including some with initial fees, require participants to reimburse the State for all oversight costs (Alabama, Arizona, California, Delaware, Indiana, Maine, Minnesota, Missouri, Montana, New York, Oregon, Texas, and Utah). In Delaware, for

example, the State collects a $5K deposit, but returns any part of the deposit not expended on oversight. Six States had formulas for calculating State costs, with Texas, Utah, and Minnesota reporting hourly rate of $60.80, $60, and $70 respectively.

Nine States (Maine, Michigan, Minnesota, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Utah) use appropriated funds for their programs. South Carolina and Nevada fund their voluntary cleanup programs though their cleanup funds. Participants fund the Oklahoma voluntary cleanup program, but the fee is handled on a case-by-case basis. Wisconsin's program is currently unfunded, but the State is considering a proposal to collect fees.

Several States use funding from two or more of these sources. For example, Tennessee charges a $5K fee plus reimbursement of State costs. South Carolina uses both appropriations and its Hazardous Waste Contingency Fund.

B. BROWNFIELDS PROGRAMS

States have been targeting brownfields, or abandoned industrial sites, through a variety of means. Tables V-20 and V-21 provide details about brownfields programs run by the States. Table V-20 shows whether the State reports that it has a formal program, under what authority the program has been developed (or alternative approaches to dealing with brownfields if no program exists), and the criteria for including a site in a brownfields program. Table V-21 presents the number of sites that have been identified by the program; the number where cleanup is underway, and the number of sites that have commitments for redevelopment.

By the end of FY95, 15 States had established formal brownfields programs and eight others were in the process of developing some sort of program. Five of the 15 States with programs formally address brownfields through their voluntary cleanup programs. One such State is Pennsylvania, where all sites are eligible for consideration under the voluntary approach and an emphasis is placed on "Special Industrial Areas", which are defined as orphan sites, sites with bankrupt owners, or sites within State-designated enterprise zones. Five other States which do not target brownfields specifically note that their voluntary programs cover brownfields issues.

The States in EPA Region V exhibit the greatest degree of brownfields activity with five of the six States sponsoring formal programs. The number of sites in their programs exceed those of other regions by an order of magnitude: Minnesota has identified approximately 700 sites through its Voluntary Investigation and Cleanup Program, and currently is redeveloping about half of those, many of which are brownfield sites; Illinois has identified 400-500 sites and is redeveloping almost all of them; Michigan reported 121 site identifications with activity at 70 sites; and Indiana has identified and begun redevelopment at 70 sites. Four out of six States in Region I have created brownfields programs. In Region X, only Oregon has established a program; more than 100 sites have been targeted in its voluntary cleanup program, many of which are brownfields. On the other end of the spectrum, no States in Regions IV, VIII, or IX have created formal brownfields programs. In

Region IX, California and Arizona address these sites through different programs. In Region VIII, Colorado participates through three EPA pilot sites. One State each in regions II, VI, VII, and X have developed formal programs, as have two States in Region III. Four States in Region 4 are in the process of developing programs, and some of them are involved in pilot initiatives of the EPA.

Of the 15 States with formal brownfields programs, three were unable to estimate the number of sites that have been identified, acted upon, or committed to redevelopment. Four other States did not have records on how many of the identified sites held commitments for redevelopment.

Chapter V

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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; public participation procedures; and fund balance. 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 effectiveness of State programs. 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 groundwater 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.

- "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.

- "Fund Balance" lists the balance of each State's cleanup fund at the end of fiscal year 1995 (FY95). If a State has multiple cleanup funds, this column indicates the sum of the balances. The balances, which range from zero to over half 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.

TABLE V-1
OVERVIEW OF STATE PROGRAMS

Region	State	Cleanup Enforcement Authority	Staffing Levels	Public Participation Requirements or Policy	Fund Balance
1	Connecticut	Yes	54	Required and Policy	$10,575,000
	Maine	Yes	20	Policy	$10,537,050
	Massachusetts	Yes	228	Required and Policy	$2,513,036
	New Hampshire	Yes	8	Policy	$3,000,000
	Rhode Island	Yes	31	Required	$2 655
	Vermont	Yes	21	Policy	$4,240,000
2	New Jersey	Yes	673	Required	$136,700,000
	New York	Yes	307	Required	$599,100,000
	Puerto Rico	Gen	23	None	$2,482,111
3	Delaware	Yes	31	Required	$3,700,000
	District of Columbia	HW	23	Policy	$0
	Maryland	Yes	32	Required	$0
	Pennsylvania	Yes	132	Required	$75,000,000
	Virginia	HW	18	None	$2,575,861
	West Virginia	HW,GW	13	None	$1,000,000
4	Alabama	Yes	20	Required	$478,167
	Florida	Yes	64	Policy	$7,000,000
	Georgia	Yes	19	Required	$13,029,281
	Kentucky	Yes	30	Required and Policy	$1,770,000
	Mississippi	HW, Gen	15	Policy	$1,325,000
	North Carolina	Yes	30	Required	$7,800,000
	South Carolina	Yes	31	Policy	$18,635,064
	Tennessee	Yes	66	Required	$8,036,052
5	Illinois	Yes	112	Required and Policy	$6,400,000

Yes = Specific Authority Gen. = General environmental protection authority
HW = Hazardous waste authority GW = Groundwater protection authority

TABLE V-1
OVERVIEW OF STATE PROGRAMS

Region	State	Cleanup Enforcement Authority	Staffing Levels	Public Participation Requirements or Policy	Fund Balance
5	Indiana	Yes	59	Policy	$50,512,589
	Michigan	Yes	306	Required	$184,000,000
	Minnesota	Yes	104	Policy	$2,981,000
	Ohio	Yes	187	Required and Policy	$39,560,693
	Wisconsin	Yes	53	Required and Policy	$3,472,400
6	Arkansas	Yes	10	Required	$7,450,050
	Louisiana	Yes	35	Required	$2,007,883
	New Mexico	Yes	18	Required and Policy	$1,204,500
	Oklahoma	Gen	17	Policy	$2,096,005
	Texas	Yes	105	Required	$47,361,124
7	Iowa	Yes	11	Policy	$1,300,000
	Kansas	Yes	106	Policy	$225,000
	Missouri	Yes	49	Required	$5,300,000
	Nebraska	GW	18	Required	$0
8	Colorado	GW, HW	29	Policy	$16,200,000
	Montana	Yes	29	Required	$1,451,893
	North Dakota	Yes	6	Policy	$129,000
	South Dakota	Yes	4	Policy	$1,750,000
	Utah	Yes	36	Policy	$5,100,000
	Wyoming	Gen	5	None	$0
9	Arizona	Yes	26	Required	$1,280,000
	California	Yes	310	Required	$59,400,000
	Hawaii	Yes	22	Required	$3,000,000
	Nevada	HW, GW	14	Required	$1,000,000

Yes = Specific Authority Gen. = General environmental protection authority
HW = Hazardous waste authority GW = Groundwater protection authority

TABLE V-1
OVERVIEW OF STATE PROGRAMS

Region	State	Cleanup Enforcement Authority	Staffing Levels	Public Participation Requirements or Policy	Fund Balance
10	Alaska	Yes	45	Policy	$73,356,000
	Idaho	Gen	21	Policy	$4,375,877
	Oregon	Yes	99	Required	$5,974,000
	Washington	Yes	149	Required	$28,536,973
Total:			3874		$1,464,924 264

Yes = Specific Authority Gen. = General environmental protection authority
HW = Hazardous waste authority GW = Groundwater protection authority

TABLE V-2

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Statutory Authorities and Provisions

SUMMARY

- Two States have no fund.
- Five States have limited fund capabilities, in that their funds can only be used for emergency responses and/or CERCLA match.
- Forty-one States have State superfund laws that provide enforcement authorities.
- Eleven States have enforcement authorities only in statutes other than their State superfund laws.
- Thirty States have statutory provisions for a priority list.
- Seventeen States report some authority for citizen suits.
- Fourteen States provide compensation for victims of hazardous waste releases, although nine States limit that relief to replacement of water supplies.
- Twenty-five States have some mandatory provisions governing property transfers, and two others have property transfer provisions only in their voluntary cleanup laws.
- Twenty-six States have statutory authorities for voluntary or brownfields cleanup programs (other States have adopted such programs by regulation or policy).

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Reg	State	Statute	Cleanup Fund	Enforce Author	Prior List	Citizen Suit	Victim Comp	Prop Trans	Vol Cleanup
1	CT	Property Transfer Law						X	X
		Emergency Spill Response Fund	X	X			WS		
		Public Act 87-561		X	X				
		P A 95-190 (Licensed Environmental Professional and voluntary program)		X					X
		Urban Sites Remedial Action Program	X					X	
	ME	An Act to Assist in the Cleanup of Contaminated Property							
		Uncontrolled Hazardous Substance Sites Act	X	X					
		Property Transfer Statute						X	X
	MA	Oil and Hazardous Material Release Prevention and Response Act	X	X	X	X			X
	NH	New Hampshire Hazardous Waste Cleanup Fund Act (HWCF)	X	X					
	RI	Hazardous Waste Management Act	X	X		X	X	X	
		Industrial Property Remediation and Reuse Act		X					X
	VT	Waste Management Act		X					
		Act Relating to Administrative Enforcement of Specified Environmental Laws		X					
		Water Pollution Control Act	X				X		
		Petroleum Cleanup Fund							
2	NJ	Industrial Site Recovery Act		X				X	
		Spill Compensation and Control Act	X	X			X		X
		S. 1070	X						X
	NY	New York State Superfund Act	X						
		Environmental Quality Bond Act of 1986	X						
		Environmental Conservation Law (Abandoned Sites Act)		X	X		WS	X	
	PR	Environmental Emergencies Fund Act, Law 81	X						
		Public Policy Environmental Act		X					
3	DE	Hazardous Substance Cleanup Act	X	X	X			X	X
	DC	Hazardous Waste Management Act		X					
	MD	Ann. Code of Maryland, Environment Article, Title 7 Hazardous Materials and Hazardous Substances	X	X	X		WS		
	PA	Land Recycling and Environmental Remediation Standards Act						X	X

ER: Emergency Response and Removals
CS: CERCLA Share
WS: Water Supplies
O: Other Statutes

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Reg	State	Statute	Cleanup Fund	Enforce Author	Prior List	Citizen Suit	Victim Comp	Prop Trans	Vol Cleanup
3	PA	Hazardous Sites Cleanup Act (HSCA) (Act 108) 1988	X	X	X	X	WS	X	
	VA	Waste Management Act		X					X
		Virginia Environmental Emergency Response Fund Act	X						
	WV	Groundwater Protection Act		WS					
		Hazardous Waste Emergency Response Fund Act	X						
		Harardous Waste Management Act		X				X	
4	AL	Alabama Hazardous Substances Cleanup Fund	X	X					X
	FL	Pollutant Discharge Prevention and Removal Act	X	X			WS		
		Resource Recovery and Management Act	X	X					
	GA	The Hazardous Site Response Act of 1992 (HSRA)	X	X	X			X	
	KY	KRS 224 01-400; 224 46-580(13)	X	X	X	X		X	
	MS	Solid Waste Disposal Act of 1974	X	X					
		Property Transfer Act of 1993						X	
		Air and Water Pollution Control Act (including Pollution Emergency Fund)	X	X					
	NC	Solid and Hazardous Wastes Management Act	X	X			WS	X	
		Inactive Hazardous Sites Response Act of 1987	X	X	X			X	X
	SC	Hazardous Waste Management Act	X	X	X			X	
	TN	Hazardous Waste Management Act of 1983	X	X	X			X	X
5	IL	Responsible Property Transfer Act						X	
		Illinois Environmental Protection Act	X	X				X	X
	IN	Voluntary Remediation Program							X
		Responsible Property Transfer Law						X	
		Environmental Management Act	X	X					
		Hazardous Substances Response Trust Fund Act	X	X	X				
	MI	Michigan Natural Resources and Environmental Protection Act	X	X	X	X		X	X
	MN	Minnesota Environmental Response & Liability Act	X	X	X	X	X	X	X
	OH	Voluntary Action Program						X	X
		Solid and Hazardous Waste Laws	X	X	X	X			X
	WI	Environmental Repair Statute	X	X	X				
		Hazardous Substance Spill Statute		X					

ER: Emergency Response and Removals
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TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Reg	State	Statute	Cleanup Fund	Enforce. Author	Prior List	Citizen Suit	Victim Comp	Prop Trans	Vol Cleanup
5	WI	Abandoned Containers Statute		X					
		Contaminated Land Recycling Statute		X				X	X
6	AR	Arkansas Emergency Response Fund Act	X	X	X				
		Arkansas Remedial Action Trust Fund Act	X	X					
		Arkansas Hazardous Waste Management Act							
	LA	Liability for Hazardous Substance Remedial Action Law		X					
		Hazardous Waste Control Law	X	X					
		Inactive and Abandoned Hazardous Waste Site Law	X		X			X	X
		Environmental Quality Law	X	X		X		X	
	NM	Hazardous Waste Act	ER.CS	X					
		The Water Quality Act		X					
	OK	50 OS 1991 2-1 (Public Nuisance Law)		X					
		Environmental Quality Code		X					X
		Hazardous Waste Fund Act	ER/CS						
		Environmental Quality Act	CS	X					
	TX	The Solid Waste Disposal Act	X	X	X				
		Voluntary Cleanup Authority							X
		Texas Property Code						X	
		Hazardous Substances Spill Prevention and Control Act	X						
7	IA	Groundwater Protection Act							
		Groundwater Hazard Documentation Law						X	
		Environmental Quality Act	X	X	X	X	WS	X	
	KS	Environmental Response Act	X	X					
		Solid Waste Management Act	X	X					
		The Water Pollution Control Statutes	X	X					
		Kansas Water Plan	X						
		Kansas Drycleaner Environmental Response Act	X		X				
	MO	Hazardous Waste Management Law	X	X	X			X	
		Voluntary Cleanup Law						X	X
	NE	Environmental Protection Act		X		X			
		Remedial Action Plan Monitoring Act							X
8	CO	Hazardous Waste Sites Act	CS	X					
		Hazardous Waste Management Act							
		Water Quality Control Act							
		The Voluntary Cleanup and Redevelopment Act							X
	MT	State Participation in CERCLA	X						

ER. Emergency Response and Removals
CS: CERCLA Share
WS: Water Supplies
O: Other Statutes

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Reg	State	Statute	Cleanup Fund	Enforce. Author	Prior List	Citizen Suit	Victim Comp	Prop Trans	Vol Cleanup
8	MT	Comprehensive Environmental Cleanup and Responsibility Act	X	X	X				X
	ND	Environmental Quality Restoration Fund	X			O			
		Water Pollution Control Law		X					
		Hazardous Waste Management Act (HMWA)		X					
	SD	Environmental Protection Act							
		Regulated Substance Discharge Act	X	X					
		Water Pollution Control Act							
		Hazardous Waste Management Act		X					
	UT	Hazardous Substances Mitigation Act	X	X	X				X
	WY	Environmental Quality Act	ER	X		X		X	
9	AZ	Environmental Quality Act	X	X	X	X			X
	CA	Property transfer disclosure law						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					
		Hazardous Waste Statute	X	X					
10	AK	Oil and Hazardous Substance Pollution Control Law	X						
		Oil and Hazardous Substance Release Control Law		X					
		Oil and Hazardous Substance Releases Law	X		X				
		Liability and Cost for Oil and Hazardous Substance Discharge Law		X					
	ID	Environmental Protection and Health Act							
		Idaho Hazardous Waste Management Act	ER	X		X			
	OR	Environmental Cleanup Law	X	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

*

Hazardous Sites

SUMMARY

- States identify ~85,000 known and suspected sites, a decline from the ~100,000 identified in 1993.
- The number of known and suspected sites in each State range from 0 to 20,000.
- States identify ~30,000 sites as needing attention, a decline from the ~40,000 identified in 1993.
    - The number of sites needing attention in each State ranges from 0 to 7,000.
    - Only five States have more than 1,000 sites identified as "needing attention".
- Thirty-five States maintain some kind of officially sanctioned inventory, priority list, or registry. However, the numbers on these lists are not comparable and cannot be aggregated because State definitions vary widely; some lists include sites where no activity is required, while others include only sites where the State is funding cleanup; 17 States -- while maintaining inventories -- have no officially sanctioned list.

TABLE V-3
HAZARDOUS SITES

Region	State	Final NPL Sites	Proposed NPL Sites	Delisted NPL Sites	Known and Suspected State Sites	State Sites Identified as Needing Attention	State Inventory or Priority List
1	CT	15	0	1	2440	649	11
	ME	11	1	0	419	92	419
	MA	30	0	1	7500	4500	380
	NH	17	0	0	250	250	250
	RI	12	0	0	300	40	-
	VT	8	1	0	1700	931	1700
2	NJ	108	0	7	20000	6500	-
	NY	81	0	7	929	793	929
	PR	9	1	0	256	256	-
3	DE	19	0	2	280	120	120
	DC	0	0	0	30	0	-
	MD	13	1	2	463	198	-
	PA	100	2	8	100	50	12
	VA	24	0	2	2015	363	-
	WV	6	1	1	-	-	-
4	AL	12	1	1	650	125	-
	FL	54	4	6	1023	656	-
	GA	13	1	1	904	82	351
	KY	20	0	0	1000	600	15
	MS	2	2	1	770	156	133
	NC	23	0	1	1029	801	183
	SC	24	0	1	550	120	120
	TN	17	1	0	1270	198	156
5	IL	38	1	2	5000	950	120
	IN	36	1	5	2500	200	63
	MI	74	4	6	-	2764	2764

Dash = No Figure Available or No List

TABLE V-3
HAZARDOUS SITES

Region	State	Final NPL Sites	Proposed NPL Sites	Delisted NPL Sites	Known and Suspected State Sites	State Sites Identified as Needing Attention	State Inventory or Priority List
5	MN	47	0	7	3600	215	181
	OH	34	4	0	1190	406	1190
	WI	41	0	0	4000	565	4000
6	AR	12	0	1	398	45	12
	LA	14	5	0	690	136	690
	NM	10	1	1	278	182	56
	OK	10	0	0	767	162	-
	TX	27	0	4	821	66	51
7	IA	18	1	2	900	200	69
	KS	11	2	13	609	324	494
	MO	22	0	1	1475	200	52
	NE	8	2	0	400	200	-
8	CO	17	2	1	225	225	-
	MT	8	1	0	277	240	277
	ND	2	0	1	0	0	-
	SD	3	0	1	1065	241	1065
	UT	12	2	0	220	-	-
	WY	3	0	0	-	-	-
9	AZ	11	0	0	1620	400	27
	CA	95	1	1	4809	1079	293
	HI	4	0	0	200	25	1
	NV	1	0	0	136	136	-
10	AK	8	0	0	1347	1347	1347
	ID	8	2	1	59	59	-
	OR	11	1	1	1559	218	124
	WA	56	0	4	1364	932	507

Dash = No Figure Available or No List

TABLE V-4

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Removal and Remedial Actions Taken at Non-NPL Sites

SUMMARY

- The number of actions underway ranges from 0 (Delaware, Idaho, and North Dakota) to 9,276 (New Jersey).
- The number of actions completed during FY95 ranges from 0 (Colorado, Iowa, Massachusetts, Montana, and Puerto Rico) to 3,405 (Texas).
- The number of actions completed since the start of a State's program ranges from 0 (Colorado, Nebraska, North Dakota, and Puerto Rico) to 16,633 (Texas).
- The total number of actions reported by all States as of the end of FY95 was:
  - Actions underway: 16,090
  - Actions completed during last fiscal year: 7,960
  - Actions completed since start of program: 44,690

TABLE V-4
REMOVAL AND REMEDIAL ACTIONS TAKEN
NON-NPL SITES

Region	State	Actions Underway	Actions Completed Last Fiscal Year	Actions Completed Since Start of Program
1	Connecticut	300	40	103
	Maine	5	10	48
	Massachusetts	2356	-	3462
	New Hampshire	-	-	-
	Rhode Island	40	13	32
	Vermont	200	60	726
2	New Jersey	9276	2366	12004
	New York	79	65	596
	Puerto Rico	2	0	0
3	Delaware	0	3	15
	District of Columbia	2	5	0
	Maryland	-	-	-
	Pennsylvania	13	12	62
	Virginia	30	4	70
	West Virginia	-	-	-
4	Alabama	22	18	89
	Florida	23	5	44
	Georgia	108	8	8
	Kentucky	105	59	325
	Mississippi	133	30	80
	North Carolina	11	13	114
	South Carolina	5	3	24
	Tennessee	13	17	341
5	Illinois	4	14	75
	Indiana	25	13	43
	Michigan	250	1312	5028

Dash = No Figure Available

TABLE V-4
REMOVAL AND REMEDIAL ACTIONS TAKEN
NON-NPL SITES

Region	State	Actions Underway	Actions Completed Last Fiscal Year	Actions Completed Since Start of Program
5	Minnesota	185	29	206
	Ohio	105	42	255
	Wisconsin	130	42	1200
6	Arkansas	5	1	31
	Louisiana	11	29	133
	New Mexico	40	6	33
	Oklahoma	1	4	24
	Texas	10	3405	16633
7	Iowa	25	0	-
	Kansas	290	15	101
	Missouri	42	7	100
	Nebraska	-	-	-
8	Colorado	2	0	0
	Montana	21	0	125
	North Dakota	0	0	0
	South Dakota	241	63	824
	Utah	30	2	9
	Wyoming	-	-	-
9	Arizona	13	8	69
	California	204	60	710
	Hawaii	4	10	30
	Nevada	118	68	340
10	Alaska	1216	73	334
	Idaho	0	1	4
	Oregon	232	13	81
	Washington	163	12	159

Dash = No Figure Available

TABLE V-5

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Program Organization

SUMMARY

- Program staff levels range from three staff members to 650.
- Only five States now have program staff levels below ten FTE.
- The overall program staff level was 3,585 FTE, up from 3,491 in 1993.
- Twenty-five States rely solely on the State Attorney General's office for legal support.
- Sixteen States rely solely on the responsible agency for legal support.
- Total legal support was 211 FTE attorneys, down from 247 in 1993.

TABLE V-5
PROGRAM ORGANIZATION

Reg	State	Agency	Program	Staff	Legal Support Office	Number of Attorney
1	CT	Department of Environmental Protection	Permitting, Enforcement and Remediation Division, Bureau of Water Management	51	DEP Counsel to the Commissioner, AG's Office	
	ME	Department of Environmental Protection	Division of Site Investigation and Remediation	18	AG's Office	
	MA	Department of Environmental Protection	Bureau of Waste Site Cleanup	206	DEP Office of General Counsel, AG's Office	[illegible]
	NH	Department of Environmental Services	Hazardous Waste Management Compliance Bureau	5	AG's Office	
	RI	Department of Environmental Management	Division of Site Remediation	30	DEM Office of Legal Services	
	VT	Department of Environmental Conservation	Hazardous Sites Management Section	14	DEC Enforcement Division, AG's Office	
2	NJ	Department of Environmental Protection	Site Remediation Program	650	AG's Office	2
	NY	Department of Environmental Conservation	Division of Hazardous Waste Remediation	289	DEC Division Environmental Enforcement, AG's Office	1[illegible]
	PR	Environmental Quality Board	Emergency Response and Superfund Area	22	Environmental Quality Board Legal Division	1
3	DE	Department of Natural Resources and Environmental Control	Superfund Branch	30	AG's Office	1
	DC	Department of Consumer and Regulatory Affairs	Pesticides, Hazardous Waste and Underground Storage Tanks Division	22	Office of Corporate Counsel	1
	MD	Department of Environment	Environmental Restoration and Redevelopment Program	30	AG's Office	2
	PA	Department of Environmental Protection	Land Recycling and Cleanup Program	120	DEP Office of Chief Counsel	12

TABLE V-5
PROGRAM ORGANIZATION

Reg.	State	Agency	Program	Staff	Legal Support Office	Number of Attorneys
3	VA	Department of Environmental Quality	Office of Federal Facilities Restoration and Superfund Programs	17	AG's Office	1
	WV	Department of Commerce, Labor and Environmental Resources	Office of Waste Management	12	AG's Office	1
4	AL	Department of Environmental Management	Special Projects Office	20	DEM Office of General Counsel	0
	FL	Department of Environmental Protection	Bureau of Waste Cleanup	62	Office of General Counsel	2
	GA	Environmental Protection Division	Hazardous Sites Response Program	18	State Law Department	1
	KY	Department for Environmental Protection	Natural Resources and Environmental Protection Cabinet, Division of Waste Management, Superfund Branch	28	Office of Legal Services	2
	MS	Department of Environmental Quality	Office of Pollution Control, Hazardous Waste Division	11	Department of Environmental Quality	4
	NC	Department of Environment, Health, And Natural Resources	Superfund Section	29	AG's Office	1
	SC	Department of Health and Environmental Control	Bureau of Solid and Hazardous Waste Management	30	DHEQ Legal Office	1
	TN	Department of Environment and Conservation	Division of Superfund	64	Office of General Counsel, AG's Office	2
5	IL	Environmental Protection Agency	Remedial Project Management Section	105	EPA Office of Legal Counsel, AG's Office	7
	IN	Department of Environmental Management	Office of Environmental Response, Project Management and Emergency Response Branches	53	DEM Office of Legal Counsel, AG's Office	6

TABLE V-5
PROGRAM ORGANIZATION

Reg.	State	Agency	Program	Staff	Legal Support Office	Number of Attorneys
5	MI	Department of Environmental Quality	Environmental Response Division	298	AG's Office	8
	MN	Pollution Control Agency	Groundwater and Solid Waste Division Site Response Section	98	AG's Office, Environmental Protection Program	5
	OH	Environmental Protection Agency	Emergency and Remedial Response	176	EPA internal legal staff, AG's Office	11
	WI	Department of Natural Resources	Emergency and Remedial Response Section	50	Bureau of Legal Services	3
6	AR	Department of Pollution Control and Ecology	Hazardous Waste Division Superfund Branch	10	DPC&E Legal Division	0
	LA	Department of Environmental Quality	Legal Affairs and Enforcement Office	34	Legal Affairs and Enforcement Office	1
	NM	Environment Department	Superfund Oversight Section of Ground Water Quality Bureau	17	Office of General Counsel	1
	OK	Department of Environmental Quality	Waste Management Division	16	Office of General Counsel	1
	TX	Natural Resource Conservation Commission	Pollution Cleanup Division	102	NRCC Legal Services Division	3
7	IA	Department of Natural Resources	Solid Waste Section	11	DNR Compliance and Enforcement Bureau, AG's Office	0
	KS	Department of Health and Environment	Bureau of Environmental Remediation	103	Office of Legal Services	3
	MO	Department of Natural Resources	Hazardous Waste Program, Superfund Section	48	AG's Office	1
	NE	Department of Environmental Quality	State Superfund Section of the Air and Waste Management Division	17	DEQ	1
8	CO	Department of Public Health and Environment	Remedial Programs	19	AG's Office	1

TABLE V-5
PROGRAM ORGANIZATION

Reg	State	Agency	Program	Staff	Legal Support Office	Number of Attorneys
8	MT	Department of Environmental Quality	Environmental Remediation Division	25	AG's Office	4
	ND	Department of Health	Environmental Health Section	5	AG's Office	1
	SD	Department of Environment and Natural Resources	Groundwater Quality Program	3	AG's Office	1
	UT	Department of Environmental Quality	Superfund Branch	34	AG's Office	2
	WY	Department of Environmental Quality	Water Quality Division: and the Solid and Hazardous Waste Division	-	AG's Office	5
9	AZ	Department of Environmental Quality	Remedial Projects Section	24	In-house paralegals, AG's Office	2
	CA	Environmental Protection Agency	Department of Toxic Substances Control -- Site Mitigation Program	297	Department of Toxic Substance Control's Office of Legal Counsel, AG's Office	13
	HI	Department of Health	Hazard Evaluation and Emergency Response	22	AG's Office	0
	NV	Department of Conservation and Natural Resources	Bureau of Corrective Action	12	AG's Office	2
10	AK	Department of Environmental Conservation	Contaminated Sites Remediation Program	42	AG's Office	3
	ID	Division of Environmental Quality	Community Programs and Planning and Support Services	20	AG's Office - Natural Resources Division	1
	OR	Department of Environmental Quality	Waste Management and Cleanup Division	98	AG's Office	1
	WA	Department of Ecology	Waste Management Division	145	AG's Office	4

TABLE V-6

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Program Administration and Staff: Funding Sources

SUMMARY

- Thirty States use State general funds for program administration and staff.
- Thirty-six States use State cleanup funds for program administration and staff.
- Fifty States use federal funds for program administration and staff.

TABLE V-6
PROGRAM ADMINISTRATION AND STAFF: FUNDING SOURCES

Region	State	State General Fund	Cleanup Fund	Federal Grants	Other
1	Connecticut	22%	37%	40%	2%
	Maine	10%	61%	29%	
	Massachusetts	56%		27%	17%
	New Hampshire	80%		20%	
	Rhode Island	27%	27%	46%	
	Vermont		2%	75%	23%
2	New Jersey		97%	3%	
	New York	1%	92%	7%	
	Puerto Rico	10%		90%	
3	Delaware	10%	40%	50%	
	District of Columbia	25%		75%	
	Maryland	10%	10%	80%	
	Pennsylvania		100%		
	Virginia	10%		90%	
	West Virginia		X	X	
4	Alabama	3%	15%	82%	
	Florida		85%	15%	
	Georgia		100%		
	Kentucky	50%		50%	
	Mississippi	20%		75%	5%
	North Carolina	21%		79%	
	South Carolina	10%	17%	73%	
	Tennessee	15%	59%	26%	
5	Illinois		66%	34%	
	Indiana	6%	69%	25%	
	Michigan	10%	75%	15%	

X = Significant funding source, but no percentage available.

TABLE V-6
PROGRAM ADMINISTRATION AND STAFF: FUNDING SOURCES

Region	State	State General Fund	Cleanup Fund	Federal Grants	Other
5	Minnesota		75%	25%	
	Ohio		85%	15%	
	Wisconsin	18%	37%	45%	
6	Arkansas		10%	90%	
	Louisiana		50%	50%	
	New Mexico	28%		64%	8%
	Oklahoma	15%	5%	80%	
	Texas		80%	20%	
7	Iowa		5%	80%	15%
	Kansas	1%	3%	17%	79%
	Missouri		20%	80%	
	Nebraska	8%		90%	2%
8	Colorado		10%	60%	30%
	Montana		X	X	X
	North Dakota			100%	
	South Dakota	10%		90%	
	Utah	4%		96%	
	Wyoming	X		X	
9	Arizona	66%		34%	
	California	1%		23%	76%
	Hawaii	18%	31%	51%	
	Nevada		80%	20%	
10	Alaska		55%	45%	
	Idaho		5%	80%	15%
	Oregon	1%	88%	3%	8%
	Washington		73%	27%	

X = Significant funding source, but no percentage available.

TABLE V-7

*

State Cleanup Funds

SUMMARY

- Fifty States have cleanup funds; two States have no fund.
- Twenty-one States have more than one fund.
- Total balance in all State funds at the end of fiscal year 1995 was $1464.9M, including $855.9M in authorized bonds in five States.
- The average State fund balance is $29.3M, and the average State fund balance excluding bond authorizations is $12.2M (5% higher than the $11.6M in 1991 & 1993).
- The median State fund balance (including bond authorizations) is $3.97M, compared to $3.89M in 1993.
- Fund balances, including bond authorizations, are distributed as follows (Maryland and Wyoming provided no information):
    - Two States have no fund (NE and DC).
    - Four States have balances less than $1M.
    - Twenty-one States have balances of at least $1M but less than $5M.
    - Eight States have balances of at least $5M but less than $10M.
    - Eight States have balances of at least $10M but less than $50M.
    - Seven States have balances of $50M or more.
- Additions to the States' funds during FY95 totalled $444.58M (46 States reporting), a 54% decrease from 1993. Additions were distributed as follows:
    - Fourteen States added less than $1M.
    - Eighteen States added at least $1M but less than $5M.
    - Four States added at least $5M but less than $10M.
    - Six States added at least $10M but less than $50M.
    - Four States added $50M or more.

TABLE V-7
STATE CLEANUP FUNDS

Region	State	Fund	Fund Balance	Additions During FY	Total Expended	Total Obligated
1	CT	Urban Sites Remedial Action Fund	$3,000,000	$10,000,000		$14,000,0
		State Superfund	$7,575,000	$9,000,000		$4,000,0
	ME	Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7661-7)	$920,137	$0	$301,295	$85,8
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund	$4,000,000			
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7662-3)	$2,042,921	$0	$812,879	$86,2
		Uncontrolled Sites Fund	$3,573,992	$425,787	$430,762	
	MA	Oil and Hazardous Material Response Loan	$2,513,036	$0	$9,515,181	$10,5,2,0
	NH	Hazardous Waste Cleanup Fund	$3,000,000	$1,200,000		
	RI	Environmental Response Fund	$2,655	$1,556,000	$2,350,000	$27,0
	VT	Environmental Contingency Fund	$840,000	$450,000	$500,000	
		Petroleum Cleanup Fund	$3,400,000	$4,000,000	$5,200,000	
2	NJ	Bond Fund	$86,600,000	$8,500,000	$8,000,000	$56,900,0
		Spill Fund	$5,500,000	$25,300,000	$29,000,000	$5,600,0
		Hazardous Discharge Site Cleanup Fund	$0	$27,100,000	$600,000	
		Remediation Guarantee Fund	$5,000,000	$0	$0	
		Sanitary Landfill Contingency Fund	$39,600,000	$3,800,000	$0	
	NY	Environmental Quality Bond Act	$594,000,000	$0	$79,500,000	$123,500,0
		Hazardous Waste Remedial Fund	$5,100,000	$51,600,000	$49,900,000	
	PR	Environmental Emergencies Fund	$2,482,111	$1,100,110	$986,717	
3	DE	Hazardous Substance Cleanup Fund	$3,700,000	$4,400,000	$2,000,000	
	DC	None				
	MD	Subaccount of the Hazardous Substance Control Fund	-	-	-	
	PA	Hazardous Sites Cleanup Fund	$75,000,000	$51,000,000	$16,000,000	$23,000,0
	VA	Environmental Emergency Fund	$2,575,861	$414,650	$73,926	
	WV	Hazardous Waste Emergency Response Fund	$1,000,000	$500,000		
4	AL	Hazardous Substance Cleanup Fund	$478,167	$441,499	$324,048	
	FL	Hazardous Waste Management Trust Fund		$1,500,000	$1,500,000	
		Water Quality Assurance Trust Fund	$7,000,000		$1,736,600	$3,745,4

TABLE V-7
STATE CLEANUP FUNDS

Region	State	Fund	Fund Balance	Additions During FY	Total Expended	Total Obligated
4	GA	Hazardous Waste Trust Fund	$13,029,281	$11,535,443	$2,538,889	$4,900,000
	KY	Hazardous Waste Management Fund	$1,770,000	$2,780,000	$1,600 000	$2,400 000
	MS	Pollution Emergency Response Fund	$1,325,000	$669,000	$2,505,000	
	NC	Inactive Hazardous Sites Cleanup Fund	$2,500,000	$400,000	$0	$0
		Emergency Response Fund	$500,000	$53,576	$53,576	
		Cost Share Fund	$4,800,000	$800,000	$200,000	$4,530 620
	SC	Hazardous Waste Contingency Fund	$18,635,064	$2,140,913	$804,045	$700,000
	TN	Remedial Action Fund	$8,036,052	$5,426,626	$3,154,805	
5	IL	Hazardous Waste Fund	$6,400,000	$3,860,000	$2,340,000	$2,134,000
	IN	Hazardous Substance Response Trust Fund	$27,548,620		$1,676,164	$813,253
		Environmental Management Special Fund	$22,963,969	$6,562,899	$253,734	
	MI	Environmental Protection Bond Fund	$165,000,000	$62,000,000		$50,000,000
		Environmental Response Fund	$19,000,000			$500,000
	MN	MERLA Superfund Account	$2,981,000	$5,692,000	$6,714,000	$408,002
	OH	505 (Funding for Remedial Actions in DERR)	$13,800,866	$25,364,587	$11,563,721	$1,277 774
		503 (Emergency Response progam in DERR, Hazardous Waste Facility Board, and Hazardous Waste Program/Division)	$25,759,827	not available	$3,754,521	$349 801
	WI	Environmental Fund	$3,472,400	$2,449,500	$5,425,000	$9,925,000
6	AR	Emergency Response Fund	$138,603	$259,915	$269,605	$0
		Remedial Action Trust Fund	$7,311,447	$1,650,542	$810,683	
	LA	Hazardous Waste Site Cleanup Fund	$2,007,883	$0	$439,733	$1,992,117
	NM	State Remediation Program	$0	$218,400	$218,400	$218,400
		Hazardous Waste Emergency Fund	$1,204,500	-	$43,020	$43,020
	OK	Hazardous Waste Fund	$1,096,005	$43,428	$348,115	$348,115
		Environmental Trust Fund	$1,000,000	$1,000,000	$0	$0
	TX	Spill Response Fund	$292,000	$0	$0	$0
		Hazardous and Solid Waste Remediation Fee Fund (Fund 550)	$47,069,124	$26,571,123	$28,615,006	
7	IA	Hazardous Waste Remedial Fund	$1,300,000	$300,000	$15,000	$25,000
	KS	State Environmental Response Fund	$225,000	$596,000	$467,000	$154,000

TABLE V-7
STATE CLEANUP FUNDS

Region	State	Fund	Fund Balance	Additions During FY	Total Expended	Total Obligated
7	KS	Dry Cleaning Trust Fund	$0	$0	$0	[illegible]
		State Water Plan - Contamination Remediation Account	$0	$1,500,000	$1,400,000	$1 250 0[illegible]
		State General Funds	$0	$497,000	$493,000	$466,0[illegible]
	MO	Hazardous Waste Remedial Fund	$5,300,000	$2,700,000	$2,800,000	
	NE	None				
8	CO	Hazardous Substances Response Fund	$13,400,000	$3,300,000	$2,800,000	$10,000 0[illegible]
		Natural Resource Damage Recovery Fund	$2,800,000		$0	[illegible]
	MT	Federal Agreements	-	-	$1,600,000	[illegible]
		Hazardous Waste/CERCLA Account	-	-	$19,762	[illegible]
		Environmental Quality Protection Fund	$1,451,893	$674,489	$690,496	[illegible]
		Direct PRP Fund	-	-	$470,000	[illegible]
	ND	Environmental Quality Restoration Fund	$129,000	$0	$0	[illegible]
	SD	Regulated Substance Response Fund	$1,750,000	$131,734	$61,885	[illegible]
	UT	Hazardous Substances Mitigation Fund	$5,100,000	$160,000	$188,000	$5,100,00
	WY	Trust and Agency Account Fund	-	-	-	
9	AZ	Water Quality Assurance Revolving Fund	$1,280,000	$1,550,000	$1,120,000	$1,540,00
	CA	Hazardous Substance Cleanup Bond Fund	$3,400,000		$2,957,000	
		Hazardous Waste Control Account	$56,000,000		$11,442,000	
	HI	Environmental Response Revolving Fund	$3,000,000	$1,700,000	$500,000	$1,200,00
	NV	Hazardous Waste Management Fund	$1,000,000		$500,000	
10	AK	Oil and Hazardous Substance Release Response Fund	$73,356,000	$15,234,000	$12,900,000	$3,600,00
	ID	Governor's Office Fund	$1,925,000			
		Hazardous Waste Emergency Account	$350,877	$78,238	$6,807	[illegible]
		Environmental Remediation Fund	$2,100,000			
	OR	Orphan Site Account	$1,042,000	$3,113,311	$2,878,824	[illegible]
		Hazardous Substance Remedial Action Fund	$4,932,000	$4,740,817	$5,902,192	[illegible]
	WA	State Toxics Control Account	$2,375,673	$25,811,359	$25,700,000	$1,185,08[illegible]
		Local Toxics Control Account	$26,161,300	$20,730,515	$29,158,688	$16,916,43[illegible]

TABLE V-8

*

Expenditures and Obligations From State Cleanup Funds

SUMMARY

- States spent a total of $386.1M from their State Funds (six States not reporting and two States have no Fund).
- States obligated a total of $363.4M to be spent in the future (38 States reporting).
- States spent $203M on non-NPL sites (37 States reporting).
- Total expenditures are distributed as follows:
  - Fifteen States spent less than $1M.
  - Sixteen States spent at least $1M but less than $5M.
  - Five States spent at least $5M but less than $10M.
  - Six States spent at least $10M but less than $50M.
  - Two States spent $50M or more.
- The median spent by States was $2.345M, compared to $2.3M in 1993.
- The median spent on non-NPL sites was $1.12M.

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Reg	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligate
1	CT	Urban Sites Remedial Action Fund					$14,000,000	$14 000
		State Superfund						$4 000
	ME	Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7661.7)			$301,295			$85
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund						
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7662.3)			$812,879			$86
		Uncontrolled Sites Fund			$430,762			
	MA	Oil and Hazardous Material Response Loan	$2,065,453	$7,449,728	$9,515,181	$4,373,148	$6,138,857	$10 512.
	NH	Hazardous Waste Cleanup Fund						
	RI	Environmental Response Fund			$2,350,000			$2
	VT	Environmental Contingency Fund	$0	$500,000	$500,000	$0	$0	
		Petroleum Cleanup Fund	$0	$5,200,000	$5,200,000	$0	$0	
2	NJ	Bond Fund			$8,000,000			$56 900
		Spill Fund	$550,000	$28,450,000	$29,000,000	$100,000	$5,500,000	$5,600.
		Hazardous Discharge Site Cleanup Fund	$10,000	$590,000	$600,000			
		Remediation Guarantee Fund			$0			
		Sanitary Landfill Contingency Fund			$0			
	NY	Environmental Quality Bond Act	$100,000	$79,400,000	$79,500,000			$123,500.
		Hazardous Waste Remedial Fund			$49,900,000			
	PR	Environmental Emergencies Fund			$986,717			
3	DE	Hazardous Substance Cleanup Fund	$0	$2,000,000	$2,000,000	$0	$0	
	DC	None						
	MD	Subaccount of the Hazardous Substance Control Fund	-	-	-	-	-	

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Reg	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total, Obligated
3	PA	Hazardous Sites Cleanup Fund	$6,000,000	$10,000,000	$16,000,000	$10,000,000	$13,000,000	$23,000,000
	VA	Environmental Emergency Fund		$73,927	$73,926			
	WV	Hazardous Waste Emergency Response Fund						
4	AL	Hazardous Substance Cleanup Fund		$324,048	$324,048			
	FL	Hazardous Waste Management Trust Fund			$1,500,000			
		Water Quality Assurance Trust Fund	$0	$1,736,600	$1,736,600	$500,000	$3,245,400	$3,745,400
	GA	Hazardous Waste Trust Fund		$2,538,889	$2,538,889		$4,900,000	$4,900,000
	KY	Hazardous Waste Management Fund	$94,000	$1,500,000	$1,600,000	$353,000	$2,040,000	$2,400,000
	MS	Pollution Emergency Response Fund	$0	$2,505,000	$2,505,000			
	NC	Inactive Hazardous Sites Cleanup Fund		$0	$0		$0	$0
		Emergency Response Fund	$0	$53,576	$53,576			
		Cost Share Fund	$200,000	$0	$200,000	$4,530,620	$0	$4,530,620
	SC	Hazardous Waste Contingency Fund	$61,435	$742,610	$804,045	$0	$700,000	$700,000
	TN	Remedial Action Fund	$59,000	$1,423,000	$3,154,805			
5	IL	Hazardous Waste Fund	$420,000	$1,920,000	$2,340,000			$2,134,000
	IN	Hazardous Substance Response Trust Fund	$711,261	$964,903	$1,676,164	$101,995	$722,175	$813,253
		Environmental Management Special Fund	$0	$253,734	$253,734		$13,607,473	
	MI	Environmental Protection Bond Fund						$50,000,000
		Environmental Response Fund				$0	$500,000	$500,000
	MN	MERLA Superfund Account	$74,573	$6,639,427	$6,714,000	$35,427	$372,575	$408,002
	OH	505 (Funding for Remedial Actions in DERR)			$11,563,721			$1,277,774

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Reg	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
5	OH	503 Emergency Response progam in DERR, Hazardous Waste Facility Board, and Hazardous Waste Program Division)			$3 754,521			$34
	WI	Environmental Fund	$1,075 000	$4,350,000	$5,425,000	$1 075 000	$8 850 000	$9 925
6	AR	Emergency Response Fund	$0	$269,605	$269 605	$0	$0	
		Remedial Action Trust Fund	$186,880	$623,803	$810,683			
	LA	Hazardous Waste Site Cleanup Fund	$331,583	$108,150	$439,733	$331 583	$1 660 534	$ 992
	NM	State Remediation Program	$0	$218,400	$218,400	$0	$218,400	$218
		Hazardous Waste Emergency Fund	$0	$43,020	$43,020	$0	$43,020	$43
	OK	Hazardous Waste Fund	$240,014	$108,101	$348,115	$240,014	$108,101	$348
		Environmental Trust Fund	$0	$0	$0	$0	$0	
	TX	Spill Response Fund	$0	$0	$0	$0	$0	
		Hazardous and Solid Waste Remediation Fee Fund (Fund 550)			$28,615,006			
7	IA	Hazardous Waste Remedial Fund	$1,000	$14,000	$15,000	$5,000	$20,000	$25
	KS	State Environmental Response Fund	$0	$467,000	$467,000	$0	$154,000	$154
		Dry Cleaning Trust Fund	$0	$0	$0	$0	$0	
		State Water Plan - Contamination Remediation Account	$0	$1,400,000	$1,400,000	$0	$1,250,000	$1 250
		State General Funds	$0	$493,000	$493,000	$0	$466,000	$466
	MO	Hazardous Waste Remedial Fund			$2,800,000			
	NE	None						
8	CO	Hazardous Substances Response Fund	$2,800,000	$0	$2,800,000	$10,000,000	$0	$10 000
		Natural Resource Damage Recovery Fund	$0	$0	$0	$0	$0	
	MT	Federal Agreements	$1,600,000	$0	$1,600,000	$0	$0	
		Hazardous Waste/CERCLA Account	$19,762	$0	$19,762	$0	$0	

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Reg	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
8	MT	Environmental Quality Protection Fund	$0	$690,496	$690,496	$0	$0	$0
		Direct PRP Fund	$320,000	$150,000	$470,000	$0	$0	$0
	ND	Environmental Quality Restoration Fund	$0	$0	$0	$0	$0	$0
	SD	Regulated Substance Response Fund	$0	$61,885	$61,885	$0	$0	$0
	UT	Hazardous Substances Mitigation Fund	$0	$188,000	$188,000			$5,100,000
	WY	Trust and Agency Account Fund	-	-	-	-	-	-
9	AZ	Water Quality Assurance Revolving Fund		$1,120,000	$1,120,000		$1,540,000	$1,540,000
	CA	Hazardous Substance Cleanup Bond Fund	$684,000	$2,273,000	$2,957,000			
		Hazardous Waste Control Account	$1,320,000	$10,122,000	$11,442,000			
	HI	Environmental Response Revolving Fund	$0	$500,000	$500,000	$0	$1,200,000	$1,200,000
	NV	Hazardous Waste Management Fund		$500,000	$500,000			
10	AK	Oil and Hazardous Substance Release Response Fund	-	-	$12,900,000	-	-	$3,600,000
	ID	Governor's Office Fund						
		Hazardous Waste Emergency Account	$0	$6,807	$6,807	$0	$0	$0
		Environmental Remediation Fund						
	OR	Orphan Site Account			$2,878,824			$0
		Hazardous Substance Remedial Action Fund			$5,902,192			$0
	WA	State Toxics Control Account	$650,000	$25,050,000	$25,700,000	$0	$1,185,085	$1,185,085
		Local Toxics Control Account			$29,158,688			$1,6[illegible],436

TABLE V-9

*

Sources of State Cleanup Funds

SUMMARY

Significant sources of funds (more than 20% of fund additions) are:

- Fees in 23 States (24 funds).
- Cost recoveries in 17 States (18 funds).
- Taxes in 15 States (17 funds).
- Penalties and fines in 14 States (16 funds).
- Appropriations in 13 States (13 funds).
- Bonds in 12 States (16 funds).

TABLE V-9
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	F	T	I	P	TR	CR	PF	O
1	CT	Urban Sites Remedial Action Fund		S								
		State Superfund		S								
	ME	Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7661 7)		S								
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund		S								
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7662.3)		S								
		Uncontrolled Sites Fund	S				S			S		
	MA	Oil and Hazardous Material Response Loan		S								
	NH	Hazardous Waste Cleanup Fund			S					S		
	RI	Environmental Response Fund		S				m		m		
	VT	Environmental Contingency Fund				S	m			m		
		Petroleum Cleanup Fund			S		m			m		
2	NJ	Bond Fund		S								m
		Spill Fund				S	m	m		S		m
		Hazardous Discharge Site Cleanup Fund					m			S		S
		Remediation Guarantee Fund							S			
		Sanitary Landfill Contingency Fund										
	NY	Environmental Quality Bond Act		S								
		Hazardous Waste Remedial Fund	m	S	m	S	m	m		m		
	PR	Environmental Emergencies Fund		S				m		m		
3	DE	Hazardous Substance Cleanup Fund				S	m	m		m		
	DC	None										
	MD	Subaccount of the Hazardous Substance Control Fund		S						m		
	PA	Hazardous Sites Cleanup Fund			m	S	m	m		m		
	VA	Environmental Emergency Fund						S				
	WV	Hazardous Waste Emergency Response Fund			S		m	m		m	m	
4	AL	Hazardous Substance Cleanup Fund	m		S					m		
	FL	Hazardous Waste Management Trust Fund				S	m	S	m	S		
		Water Quality Assurance Trust Fund			S	S	m	m	m	m		
	GA	Hazardous Waste Trust Fund			S		m	S		m		

S = Significant funding source (>20%) m = Minor funding source (<20%)
A. Appropriations P: Penalties T: Taxes CR: Cost Recoveries
PF: Private Funds TR: Transfers I: Interest B: Bonds F: Fees O: Other

TABLE V-9
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	F	T	I	P	TR	CR	PF	O
4	KY	Hazardous Waste Management Fund			S		m	m		m		
	MS	Pollution Emergency Response Fund						S		S		
	NC	Inactive Hazardous Sites Cleanup Fund					m	S		m		
		Emergency Response Fund					m	S		m		
		Cost Share Fund	S				m					
	SC	Hazardous Waste Contingency Fund	m		S					m		
	TN	Remedial Action Fund	S		S		m	m		S		
5	IL	Hazardous Waste Fund	m	m	S	m	m	S	m	S	m	m
	IN	Hazardous Substance Response Trust Fund	m			S	m	m		m	m	m
		Environmental Management Special Fund	S		S							
	MI	Environmental Protection Bond Fund		S								
		Environmental Response Fund	S				m	m		S		
	MN	MERLA Superfund Account				S	m	m		S		m
	OH	505 (Funding for Remedial Actions in DERR)			S			S		m		
		503 (Emergency Response progam in DERR, Hazardous Waste Facility Board, and Hazardous Waste Program/Division)	S		S			m				
	WI	Environmental Fund	S	S	S	m	m	m	m	m	m	
6	AR	Emergency Response Fund						S				
		Remedial Action Trust Fund	m		S		m	S		m		
	LA	Hazardous Waste Site Cleanup Fund				S	m	S		m		
	NM	State Remediation Program	S									
		Hazardous Waste Emergency Fund						S				
	OK	Hazardous Waste Fund			S			m				
		Environmental Trust Fund				S						
	TX	Spill Response Fund	S									
		Hazardous and Solid Waste Remediation Fee Fund (Fund 550)			S		m			m		
7	IA	Hazardous Waste Remedial Fund			S							
	KS	State Environmental Response Fund			m					S		
		Dry Cleaning Trust Fund					S					
		State Water Plan - Contamination Remediation Account					S					

S = Significant funding source (>20%) m = Minor funding source (<20%)
A Appropriations P: Penalties T Taxes CR: Cost Recoveries
PF: Private Funds TR: Transfers I: Interest B: Bonds F: Fees O: Other

TABLE V-9
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	F	T	I	P	TR	CR	PF	O
7	KS	State General Funds	S									
	MO	Hazardous Waste Remedial Fund	m		S	S	m	m		S		
	NE	None										
8	CO	Hazardous Substances Response Fund			S		m			S		
		Natural Resource Damage Recovery Fund					m	S				
	MT	Federal Agreements										S
		Hazardous Waste CERCLA Account					S					
		Environmental Quality Protection Fund					S			S		
		Direct PRP Fund									S	
	ND	Environmental Quality Restoration Fund								S		S
	SD	Regulated Substance Response Fund					m	S		S		
	UT	Hazardous Substances Mitigation Fund	S				S				m	S
	WY	Trust and Agency Account Fund						S				
9	AZ	Water Quality Assurance Revolving Fund	S	m	m	m		m		S		
	CA	Hazardous Substance Cleanup Bond Fund		S		S						
		Hazardous Waste Control Account			S					m		
	HI	Environmental Response Revolving Fund	m	m	m	S	m	m	m	m	m	
	NV	Hazardous Waste Management Fund			S	m	m	m		m		
10	AK	Oil and Hazardous Substance Release Response Fund	S		S	S		S		m		m
	ID	Governor's Office Fund					S	m		m		
		Hazardous Waste Emergency Account			m							
		Environmental Remediation Fund	m				S					
	OR	Orphan Site Account		S	m		m					
		Hazardous Substance Remedial Action Fund			S		m	m		S		
	WA	State Toxics Control Account			m	S	m	m		m		
		Local Toxics Control Account				S						

S = Significant funding source (>20%) m = Minor funding source (<20%)
A: Appropriations P: Penalties T: Taxes CR: Cost Recoveries
PF: Private Funds TR: Transfers I: Interest B: Bonds F: Fees O: Other

TABLE V-10

*

Uses of State Cleanup Funds

SUMMARY

States are authorized to use their funds for:

- Emergency response (49 States).
- Removals (48 States).
- Remedial action (44 States).
- Studies (44 States).
- CERCLA match (43 States).
- Operation and Maintenance (41 States).
- Program administration (40 States).
- Natural resource restoration (15 States).
- Victim compensation (4 States).

TABLE V-10
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC	O
1	CT	Urban Sites Remedial Action Fund	X	X	X	X	X							
		State Superfund	X	X	X	X	X	X		X		X		
	ME	Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7661 7)	X	X	X	X	X	X	X					
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund	X	X	X	X	X	X	X					
		Uncontrolled Hazardous Substance Sites Cleanup Bond Fund (7662 3)	X	X	X	X	X	X	X					
		Uncontrolled Sites Fund	X	X	X	X	X	X	X	X	X			
	MA	Oil and Hazardous Material Response Loan	X	X	X	X	X	X		X		X		
	NH	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	X			
		Spill Fund	X	X	X	X	X	X	X	X	X		X	
		Hazardous Discharge Site Cleanup Fund	X	X	X	X	X	X		X	X			
		Remediation Guarantee Fund	X	X	X	X	X							
		Sanitary Landfill Contingency Fund	X			X							X	X
	NY	Environmental Quality Bond Act	X	X	X	X	X	X		X	X	X		
		Hazardous Waste Remedial Fund									X			X
	PR	Environmental Emergencies Fund		X	X	X	X			X	X			
3	DE	Hazardous Substance Cleanup Fund	X	X	X	X	X	X	X	X	X			
	DC	None												
	MD	Subaccount of the 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	X		
	VA	Environmental Emergency Fund		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			
		Water Quality Assurance Trust Fund	X	X	X	X	X	X	X	X	X	X		
	GA	Hazardous Waste Trust Fund	X	X	X	X	X	X			X	X		

SI:Site Investigation ER:Emergency Response RM:Removals CM:CERCLA Match
SD Studies&Design RA.Rem.Actions OM:Ops.&Maint. LG:Grants to Local Govt.
NR.Natural Resourse Restor. AD:Program Admin. VC.Victim Comp. O:Other

TABLE V-10
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC
4	KY	Hazardous Waste Management Fund	X	X	X	X	X	X		X			
	MS	Pollution Emergency Response Fund	X	X	X	X				X			
	NC	Inactive Hazardous Sites Cleanup Fund	X	X	X	X	X						
		Emergency Response Fund		X									
		Cost Share Fund								X			
	SC	Hazardous Waste Contingency Fund	X	X	X	X	X	X		X	X		
	TN	Remedial Action Fund	X	X	X	X	X	X		X	X	X	
5	IL	Hazardous Waste Fund	X	X	X	X	X	X		X	X		
	IN	Hazardous Substance Response Trust Fund	X	X	X	X	X	X		X	X	X	
		Environmental Management Special Fund		X								X	
	MI	Environmental Protection Bond Fund	X	X	X	X	X	X		X	X	X	
		Environmental Response Fund	X	X	X	X	X	X	X	X	X		
	MN	MERLA Superfund Account	X	X	X	X	X	X		X	X	X	X
	OH	505 (Funding for Remedial Actions in DERR)	X		X	X	X	X			X		
		503 (Emergency Response progam in DERR. Hazardous Waste Facility Board, and Hazardous Waste Program/Division)		X						X			
	WI	Environmental Fund	X	X	X	X	X	X	X	X	X	X	
6	AR	Emergency Response Fund	X	X	X								
		Remedial Action Trust Fund	X	X	X	X	X			X	X		
	LA	Hazardous Waste Site Cleanup Fund	X	X	X	X	X	X		X	X		
	NM	State Remediation Program	X		X	X	X	X			X		
		Hazardous Waste Emergency Fund		X									
	OK	Hazardous Waste Fund		X	X					X			
		Environmental Trust Fund								X			
	TX	Spill Response Fund		X	X								
		Hazardous and Solid Waste Remediation Fee Fund (Fund 550)	X	X	X	X	X	X	X	X	X		
7	IA	Hazardous Waste Remedial Fund	X	X	X	X	X	X		X	X		
	KS	State Environmental Response Fund	X	X	X	X	X				X		
		Dry Cleaning Trust Fund	X	X	X	X	X				X		
		State Water Plan - Contamination Remediation Account	X	X	X	X	X	X		X	X		

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TABLE V-10
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC
7	KS	State General Funds	X	X							X		
	MO	Hazardous Waste Remedial Fund	X	X	X	X	X	X		X	X		
	NE	None											
8	CO	Hazardous Substances Response Fund			X			X		X	X		
		Natural Resource Damage Recovery Fund							X				
	MT	Federal Agreements											
		Hazardous Waste/CERCLA Account	X	X	X	X	X	X		X	X	X	
		Environmental Quality Protection Fund	X	X	X	X	X	X	X	X	X		
		Direct PRP Fund											
	ND	Environmental Quality Restoration Fund		X	X		X						
	SD	Regulated Substance Response Fund	X	X	X	X	X	X	X				
	UT	Hazardous Substances Mitigation Fund	X	X	X	X		X		X			
	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 Substance Cleanup Bond Fund	X	X	X	X	X	X		X	X		
		Hazardous Waste Control Account	X	X	X	X	X	X		X	X		
	HI	Environmental Response Revolving Fund	X	X	X	X	X	X	X	X	X		
	NV	Hazardous Waste Management Fund	X	X	X	X	X	X	X	X	X		
10	AK	Oil and Hazardous Substance Release Response Fund	X	X	X	X	X			X	X	X	
	ID	Governor's Office Fund								X			
		Hazardous Waste Emergency Account		X	X								
		Environmental Remediation Fund						X		X	X		
	OR	Orphan Site Account	X		X	X	X	X					
		Hazardous Substance Remedial Action Fund	X	X	X	X	X	X		X	X	X	
	WA	State Toxics Control Account	X	X	X	X	X	X	X	X	X		
		Local Toxics Control Account	X	X	X	X	X	X	X		X	X	

SI:Site Investigation ER:Emergency Response RM:Removals CM CERCLA Match
SD Studies&Design RA:Rem.Actions OM:Ops.&Maint. LG:Grants to Local Govt.
NR:Natural Resourse Restor AD:Program Admin. VC:Victim Comp O Other

TABLE V-11

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State Cleanup Policies and Criteria

SUMMARY

- Twenty-four States have promulgated standards which may be applied to hazardous sites.
- Twenty-seven States apply soil standards to determine cleanup levels.
- Thirty-seven States apply groundwater standards.
- Forty-three States reference ambient quality or background levels.
- Forty-three States report using EPA guidelines in determining cleanup levels.
- Forty-five States employ risk assessment methods at specific sites.
- Forty-nine States apply surface water quality criteria in determining cleanup levels.
- Fifty States apply MCLs and/or MCLGs.

TABLE V-11
STATE CLEANUP POLICIES AND CRITERIA

Reg	State	Promulgated Cleanup Standards	Water Quality Criteria	MCLs or MCLGs	Background Levels	Risk Assessment	EPA Guidelines	Groundwater Standards	Soil Standards	Other
1	CT	X	X	X		X		X	X	
	ME		X	X	X	X	X		X	
	MA	X	X	X	X	X	X	X	X	
	NH		X			X				
	RI		X	X	X	X	X	X		
	VT		X	X	X		X	X		X
2	NJ	X	X	X	X	X	X	X	X	
	NY		X	X	X	X	X	X		
	PR	X	X	X	X	X	X	X	X	
3	DE	X	X	X	X	X	X	X	X	
	DC	X	X	X	X	X	X	X	X	X
	MD		X	X	X	X	X	X	X	
	PA	X	X	X	X	X		X	X	
	VA		X	X		X	X			
	WV	X	X	X	X	X	X	X		
4	AL		X	X	X	X	X	X		
	FL		X	X	X	X	X	X	X	
	GA	X								
	KY	X		X	X	X				
	MS		X	X	X	X	X			X
	NC	X	X	X	X	X	X	X		
	SC		X	X	X	X	X	X		
	TN		X	X	X	X	X			
5	IL		X	X	X	X	X	X	X	
	IN		X	X	X	X	X			X
	MI	X	X	X	X	X	X			

TABLE V-11
STATE CLEANUP POLICIES AND CRITERIA

Reg	State	Promulgated Cleanup Standards	Water Quality Criteria	MCLs or MCLGs	Background Levels	Risk Assessment	EPA Guidelines	Groundwater Standards	Soil Standards	Othe
5	MN	X	X	X		X	X	X	X	
	OH		X	X	X	X	X	X	X	
	WI	X	X	X	X			X	X	
6	AR		X	X	X	X	X	X	X	
	LA		X	X	X	X	X			
	NM		X	X	X	X	X	X	X	
	OK		X	X	X	X	X	X	X	
	TX	X	X	X	X	X	X			
7	IA	X		X		X				
	KS		X	X	X			X		X
	MO		X	X	X	X	X	X	X	
	NE	X	X	X			X	X		
8	CO	X	X	X	X	X	X	X		X
	MT		X	X	X	X	X	X	X	X
	ND		X	X	X	X	X	X	X	
	SD	X	X	X	X	X	X	X	X	
	UT		X	X		X	X	X		
	WY	X	X	X	X	X	X			
9	AZ	X	X	X	X	X		X	X	
	CA	X	X	X	X	X	X			
	HI		X	X	X	X	X	X	X	
	NV	X	X	X	X		X	X	X	
10	AK		X	X	X	X	X	X	X	
	ID		X	X		X	X	X		X
	OR		X	X	X	X	X		X	X
	WA	X	X	X	X		X	X	X	X

TABLE V-12

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Public Participation

SUMMARY

- Forty-eight States have public participation procedures; 36 of these States have statutory or regulatory public participation requirements.
- Thirty States have a statutory or regulatory responsibility to provide public notice during site handling.
- Thirty States are required by statute and/or regulation to solicit public comments; an additional 14 States solicit comments as a matter of policy.
- Forty-six States hold or may hold public meetings or hearings.
- Five States make grants available to citizen groups.

TABLE V-12
PUBLIC PARTICIPATION

Reg	State	Public Notice	Public Comment	Hearings	Document Availability	Grants	Other
1	CT	reg	reg	pol	stat	-	Public participation is required. a as being policy
	ME	-	-	-	-	-	Public participation is sometimes matter of policy
	MA	stat	stat	stat	stat	stat	Public participation is required as as being policy
	NH	pol	-	pol	pol	-	
	RI	stat	stat	pol	stat	-	
	VT	reg	-	pol	-	-	Notice to municipalities of sites
2	NJ	stat	stat	stat	stat	-	
	NY	stat	stat	stat	stat	-	
	PR	none	none	none	none	none	EPA Procedures used.
3	DE	stat	stat	stat	stat	-	
	DC	pol	-	-	-	-	District gives notice persons directl affected by the site
	MD	-	stat	stat	stat	-	
	PA	stat	stat	stat	stat	stat	Community Relations Coordinators perform ad hoc participation functic
	VA	-	-	-	stat	-	
	WV	-	-	-	-	-	
4	AL	stat	stat	pol	stat	-	
	FL	pol	pol	pol	stat	-	
	GA	stat	stat	stat	stat	-	
	KY	reg	reg	pol	pol	pol	
	MS	pol	pol	pol	stat	-	
	NC	stat	stat	stat	stat	-	
	SC	pol	pol	pol	pol	-	
	TN	stat	stat	stat	stat	-	

TABLE V-12
PUBLIC PARTICIPATION

Reg.	State	Public Notice	Public Comment	Hearings	Document Availability	Grants	Other
5	IL	stat	stat	stat	stat	-	
	IN	pol	pol	pol	pol	-	VRP statute provides for public notice comment, hearings and document availability for voluntary sites only
	MI	stat	stat	stat	stat	-	
	MN	pol	pol	pol	pol	-	Participation on Community Action Groups (CAGs)
	OH	stat	stat	reg	reg	-	Community relation plans fact sheets responsiveness summaries and a citizen's information committee
	WI	stat	stat	reg	stat	-	
6	AR	stat/reg	stat/reg	stat/reg	stat/reg	-	Policy of precoordination of regulatory revisions with industry trade organizations and environmental groups
	LA	stat	stat	stat	stat	-	
	NM	reg	reg	reg	stat	-	
	OK	pol	pol	pol	pol	pol	
	TX	stat	stat	stat	-	-	
7	IA	pol	pol	pol	stat	-	
	KS	pol	pol	pol	pol	-	
	MO	stat	stat	stat	stat	-	Information - policy
	NE	reg	reg	reg	reg	-	
8	CO	pol	pol	pol	pol	-	
	MT	stat	stat	stat	stat	-	
	ND	-	-	-	-	-	Local community involvement and notice to local officials.
	SD	pol	pol	pol	stat	-	
	UT	pol	pol	pol	pol	-	In practice, until recently, most voluntary agreements did not include public participation.

TABLE V-12
PUBLIC PARTICIPATION

Reg	State	Public Notice	Public Comment	Hearings	Document Availability	Grants	Other
8	WY	-	pol	-	pol	-	Public participation is informal and includes commenting on rulemaking and permitting decisions Citizen commissions at some NPL sites
9	AZ	reg	reg	pol	stat	-	
	CA	reg	reg	reg	reg	-	
	HI	stat	reg	reg	reg	-	
	NV	stat	stat	stat	stat	-	
10	AK	pol	pol	pol	pol	-	
	ID	-	pol	pol	pol	-	
	OR	stat	stat	stat	stat	-	DEQ also has public participation policies
	WA	stat	reg	reg	reg	stat	

TABLE V-13

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Liability Standards

SUMMARY

General

- Forty-three States have retroactive liability.
- Thirty-four States have strict, joint and several liability.

Culpability Standards

- Forty-one States have strict liability.
- Eleven States have a liability standard other than strict or do not specify liability standards.

Allocation Standards

- Thirty-seven States have joint and several liability; six of these expressly permit responsible parties to seek apportionment.
- Five States have proportional liability.
- Ten States do not specify allocation standards.

TABLE V-13
LIABILITY STANDARDS

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

TABLE V-13
LIABILITY STANDARDS

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

TABLE V-14

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Penalties and Damages Available Under State Superfund Statutes

SUMMARY

- Twenty-five States provide for punitive damages.
- Twenty-two States provide for treble damages.
- One State provides for double damages.
- Two States provide for one and one-half times damages.
- Forty-seven States provide for some type of civil penalty that relates to cleanup programs, although a number of these are more directly related to hazardous waste or water quality regulatory programs.

TABLE V-14
PENALTIES AND DAMAGES AVAILABLE UNDER STATE SUPERFUND STATUTES

Region	State	Punitive Damages	Civil Penalties
1	Connecticut	1 1/2 Times	$25,000/day
	Maine	Treble	None
	Massachusetts	Treble	$25,000/day
	New Hampshire	None	None
	Rhode Island	Treble	$10,000
	Vermont	Treble	$50,000/day for violations, $1,000/day for continuing violations.
2	New Jersey	Treble	$50,000/day (and $50,000-$1 million for discharge based on substance and quantity)
	New York	None	$25,000/day
	Puerto Rico	None	$25,000/day
3	Delaware	Treble	$10,000/day
	District of Columbia	None	$25,000 per day per violation
	Maryland	None	$25,000
	Pennsylvania	Treble	$25,000/day maximum, $5,000/day minimum
	Virginia	None	$25,000/day
	West Virginia	None	None
4	Alabama	None	$25,000/day for viol. of order
	Florida	None	$25,000/day
	Georgia	Treble	$25,000/day
	Kentucky	None	$25,000/day
	Mississippi	None	$25,000/day for illegal discharge of haz waste
	North Carolina	None	$25,000/day for hazardous waste violations
	South Carolina	Treble	$25,000/day
	Tennessee	1 1/2	$10,000/day for failure to pay fees, file reports, comply with order

TABLE V-14
PENALTIES AND DAMAGES AVAILABLE UNDER STATE SUPERFUND STATUTI

Region	State	Punitive Damages	Civil Penalties
5	Illinois	Treble	$50,000/day for the first day of violation. $10,000/day for each day of continuing violations
	Indiana	Treble	$25,000/day
	Michigan	Treble	up to $25,000/day
	Minnesota	None	$20,000/day
	Ohio	None	$10,000/day
	Wisconsin	None	$5,000/day
6	Arkansas	Treble	$25,000/day
	Louisiana	Treble(to State); Double(to Prps)	Up to $25,000 for failure of PRP to provide requested information.
	New Mexico	None	$10,000/day - water quality violations. $15,000/day for discharge permit violations. up to $25,000 for compliance order violations.
	Oklahoma	None	$10,000/day per violation under nuisance law.
	Texas	Treble	$25,000/day
7	Iowa	Treble	$1000/day for failure to notify; $10,000 for water and air violations.
	Kansas	None	$10-25,000 hazardous waste; $10,000 water pollution; $5,000 for solid waste pollution.
	Missouri	Treble	$1,000/day
	Nebraska	None	None
8	Colorado	None	None
	Montana	Double	$1,000/day administrative penalties and $10,000/day judicial penalties
	North Dakota	None	$25,000/day for viol. of Hazardous Waste Management Act; $10,000/day viol. of Water Pollution Control Act.
	South Dakota	None	$10,000/day of violation
	Utah	None	$10,000/day

TABLE V-14
PENALTIES AND DAMAGES AVAILABLE UNDER STATE SUPERFUND STATUTES

Region	State	Punitive Damages	Civil Penalties
8	Wyoming	None	$10,000/day and $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. up to $25,000/day for CERCLA consent orders
	California	Treble	$25,000/day for violating an order agreement
	Hawaii	Treble	$50,000 (per violation), $10,000 (failure to report), $100,000 (maximum for knowing release)
	Nevada	None	$25,000/day
10	Alaska	None	$500 to $100,000 for first violation. no more than $100,000 for continued violations
	Idaho	None	$10,000/day
	Oregon	Treble	$10,000/day
	Washington	Treble	$25,000/day

TABLE V-15

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Natural Resource Damages Under State Laws

SUMMARY

- Twenty-eight States have authority under State laws to recover NRDs for hazardous substance sites.
- Eight States reported having recovered NRDs under State law.
- Seven States reported having such claims currently pending under State law.

TABLE V-15
NATURAL RESOURCE DAMAGES UNDER STATE LAWS

Region	State	Authority	Citation	Number Recovered	Amount Recovered	Number Pending	Amount Pending
1	CT	Yes	General authority and duties of Commissioner (22a-6a)	0	$0	0	$0
	ME	Yes	Title 38 Maine Rev Stat Sec 1367	5	$1,000,000+	0	$0
	MA	Yes	Mass Gen. Laws Ch 21E, s 5	0	$0	0	$0
	NH	No					
	RI	Yes	23-19 1-22(c)	0	$0	0	$0
	VT	No					
2	NJ	Yes	NJSA 58 10-23 11 et seq (Spill Act)	1	-	1	-
	NY	Yes	Navigation Law, Env Cons. Law, common law & nuisance statutes	-	$20,000,000+	-	-
	PR	Yes	Public Policy Environmental Act, Law #9 and Environmental Emergencies Fund Act, Law #81, Article 6	1	-	1	-
3	DE	Yes	7 Del. Code, Ch. 91	0	$0	0	$0
	DC	No					
	MD	Yes	Ann. Code Md. 7-220	0	$0	0	$0
	PA	Yes	HSCA Section 507	0	$0	0	$0
	VA	No					
	WV	No					
4	AL	No					
	FL	Yes	Fla. Stat. 403.141, 161, .726, .727, 376.121 (coastal oil spills), and 253.04 (coral reefs)	-		18	$2,200,000
	GA	No					
	KY	No					
	MS	Yes	Miss. Code Ann. 49-17-43c	-	-	0	$0

Dash = No Data Available

TABLE V-15
NATURAL RESOURCE DAMAGES UNDER STATE LAWS

Region	State	Authority	Citation	Number Recovered	Amount Recovered	Number Pending	Amount Pending
4	NC	No					-
	SC	Yes	S C Pollution Control Act	-	-	0	$0
	TN	Yes	State policy	0	$0	0	$0
5	IL	No					
	IN	No					
	MI	Yes	PA 451 of 1994 parts 201 and 31	6	$5,690,000	5	
	MN	Yes	Minn. Stat Ch. 115B 04	1	$91,000	0	$0
	OH	No					
	WI	Yes	Wis Stat. Sec 147 23	0	$0	0	$0
6	AR	Yes	Arkansas Code Ann 8-4-103(b)(3)	0	$0	0	$0
	LA	No					
	NM	No					
	OK	No					
	TX	Yes	TNRCC 30TAC 327 31. TGLO: 31TAC 20.1-20.4, 20.10. TX Natural Resource Code 40.107(c)(4)	3		5	
7	IA	Yes	Iowa Code 455B.392C.	-	-	-	-
	KS	Yes	K.S.A. 65-171 U	15	$150,000	4	< $10,000
	MO	No					
	NE	No					
8	CO	No					
	MT	Yes	Mont. Code Ann. 75-10-701 through 738.	0	$0	1	$713,000,000
	ND	No					
	SD	Yes	South Dakota Codified Laws Chapters 34A-2-75; 34A-11-14; 34A-10	0	$0	0	$0

Dash = No Data Available

TABLE V-15
NATURAL RESOURCE DAMAGES UNDER STATE LAWS

Region	State	Authority	Citation	Number Recovered	Amount Recovered	Number Pending	Amount Pending
8	UT	No					
	WY	No					
9	AZ	No					
	CA	Yes		-	$58,000,000		
	HI	Yes	H R S 128D-4	0	$0	0	$0
	NV	No					
10	AK	Yes	AS 46 04 040 (5)	-	-		
	ID	No					
	OR	Yes	ORS 465 255	0	$0	0	$0
	WA	Yes	RCW 70 105D 040 (2)	-	-	0	$0

Dash = No Data Available

TABLE V-16

*

Natural Resource Damages Activities Under CERCLA

SUMMARY

- Thirteen States reported having recovered NRDs under CERCLA.
- Eleven States have CERCLA NRD claims pending.

TABLE V-16
STATE NATURAL RESOURCE DAMAGES ACTIVITIES UNDER CERCLA

Region	State	Number Recovered	Amount Recovered	Number Pending	Amount Pending
1	CT				
	ME				
	MA	4	$22,600,000	2	-
	NH				
	RI	0	$0	1	$0
	VT				
2	NJ	5	$6,692,000	5	-
	NY				
	PR				
3	DE	1	$600,000	0	$0
	DC				
	MD				
	PA	0	$0	2	$10 000 000
	VA				
	WV				
4	AL				
	FL				
	GA				
	KY				
	MS				
	NC				
	SC	1	$3,000,000	0	$0
	TN				
5	IL				
	IN	12	$3,800,000	6	$7,000,000
	MI				

TABLE V-16
STATE NATURAL RESOURCE DAMAGES ACTIVITIES UNDER CERCLA

Region	State	Number Recovered	Amount Recovered	Number Pending	Amount Pending
5	MN	1	-	0	$0
	OH	-	$200,000	2	-
	WI				
6	AR				
	LA				
	NM	2	$200,000	0	$0
	OK				
	TX	2	-	4	-
7	IA				
	KS				
	MO				
	NE				
8	CO	5	$5,700,000	2	-
	MT	0	$0	1	$713,000 000
	ND				
	SD				
	UT	1	$37,000,000	0	$0
	WY				
9	AZ				
	CA	-	-	2	$46,000,000
	HI				
	NV				
10	AK				
	ID	2	$5,000,000	0	$0
	OR				
	WA	4	$45,000,000	3	Several Million

TABLE V-17

*

Property Transfer Provisions

SUMMARY

- Twenty-five States report that they have mandatory property transfer provisions, up from 23 in 1993 and 18 in 1991. This total does not include States that simply maintain a database of contaminated sites unless they also have some other property transfer provisions, nor does it include States that have property transfer provisions associated only with participation in their voluntary cleanup programs.

- Seventeen States have provisions that require deed recordations where hazardous sites have been either discovered, listed, or cleaned up.

- Sixteen States require disclosure by sellers to purchasers.

- Two States require cleanup or cleanup commitments in connection with transfers or sales of industrial establishments.

- Fifteen States 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.

TABLE V-17
PROPERTY TRANSFER PROVISIONS

Reg.	State	Authority	Record on Deed	Disclose before Transfer	Examine before Transfer	Cleanup at Transfer	Database
1	CT	22a-134, as amended by Pub Act 95-183		X	X	X	X
	ME	P L 1991 Chapter 81, L.D. 156; P L. 355, 1993, MRS 343-E,F.		X			X
	MA						X
	NH	HWCF					X
	RI	Haz. Waste Mgmt Act, Industrial Prop. Act	X				X
	VT						
2	NJ	Industrial Site Recovery Act		X	X	X	X
	NY	Abandoned Sites Act	X				X
	PR						
3	DE	Haz. Subs. Cleanup Act, DCA 9115	X				
	DC						
	MD						
	PA	HSCA Section 512	X	X			
	VA						
	WV	Haz. Waste Reg. 47CRS35	X	X			
4	AL						
	FL						
	GA	Hazardous Site Response Act	X				X
	KY	K.R.S. 224.01-400	X				X
	MS	Miss Code Ann. 89-1-501 to 503		X			
	NC	N.C. Gen Stat. 130A-310.8; Also residential property disclosure act, 1995	X	X			
	SC	HWMA	X				

TABLE V-17
PROPERTY TRANSFER PROVISIONS

Reg.	State	Authority	Record on Deed	Disclose before Transfer	Examine before Transfer	Cleanup at Transfer	Database
4	TN	Tenn Code Ann. 68-212-209	X				X
5	IL	Illinois Public Act 86-679	X	X			
	IN	Ind Code sec. 13-7-22.5		X	X		
	MI	PA 451 of 1994, part 201	X	X	X		X
	MN	Minn. Stat. Ch. 115B.17	X	X			X
	OH						
	WI	Wis Stat Sec. 144.765					X
6	AR						
	LA	LRS 30:2225F (1): 2281. LAC 33:3525B.	X				X
	NM						
	OK						
	TX	Texas Property Code, Ch. V		X			
7	IA	Groundwater Hazard Documentation Law	X	X			
	KS						
	MO	Hazardous Waste Management Law 260.465	X	X			X
	NE						
8	CO						
	MT						
	ND						
	SD						
	UT						
	WY	Environmental Quality Act	X				
9	AZ						

TABLE V-17
PROPERTY TRANSFER PROVISIONS

Reg.	State	Authority	Record on Deed	Disclose before Transfer	Examine before Transfer	Cleanup at Transfer	Databa
9	CA	Cal. Health & Safety Code 25359 7		X			
	HI						
	NV						
10	AK						
	ID						
	OR	ORS 465 255(c)		X			
	WA						

TABLE V-18

*

Voluntary Cleanup Authorities

SUMMARY

- Thirty-one States have voluntary cleanup programs.
- Twenty-four States have statutory authority for their programs.
- Eight States established their programs through regulation or policy.

TABLE V-18
VOLUNTARY CLEANUP AUTHORITIES

Reg.	State	Established	Authority	Citation	Relationship to State Program
1	CT	1995	Statute	PA 95-183, section 3	Component of the cleanup program
	ME	1993	Statute	Maine Rev. Stat. Secs. 343-E&F	Alternative cleanup progran
	MA		Statute; Regulation	Mass. Gen. Law. Ch. 21E, Mass. Contingency Plan (310 CMR 40.0000)	Component of the cleanup program, also maintain a covenant not to sue progran
	NH				
	RI	1993	Regulation		Component of the cleanup program
	VT				
2	NJ	1992	Regulation	NJAC 7:26C	Component of the cleanup program
	NY	1994	Policy	Organization and Delegation Memorandum 94-32	Alternative cleanup progran
	PR				
3	DE	1994	Guidance - 1994; Statute - 1995	7 Del C Chapter 91	Component of the cleanup program
	DC				
	MD				
	PA	1995	Statute	35 P.S. Section 6026.101 et seq.	Component of the cleanup program
	VA	1995	Statute	Code of Va. 10.1-1429.1 to 1429.3	Component of the cleanup program
	WV				
4	AL	1995	Statute; Policy	22-30A-1 (general program authority)	Multi-program effort between CERCLA, RCRA, and Groundwater offices
	FL				
	GA				
	KY				

TABLE V-18
VOLUNTARY CLEANUP AUTHORITIES

Reg.	State	Established	Authority	Citation	Relationship to State Program
4	MS				
	NC	1987	Statute	N.C. Gen. Stat. 130A-310 9 (original program); 310.12 (1994-95 amendments adding program for privatizing voluntary cleanup and oversight)	Component of the cleanup program
	SC	1989	Guidance		Component of the cleanup program
	TN	1994	Statute	Tenn Code Ann. 68-212-224	Component of the cleanup program
5	IL	1986	Statute	22 2 (m) of Environmental Protection Act	Component of the cleanup program
	IN	1993	Statute	Ind. Code sec. 13-7-8.9 (1993)	Alternative cleanup program
	MI	1991	Statute	PA 451, part 201	Component of the cleanup program
	MN	1988	Statute	Minn. Stat. Ch. 115B.17, Subd. 14 and Ch. 115B.175	Component of the cleanup program
	OH	1994	Statute	Ohio Revised Code 3746	Alternative cleanup program
	WI	1994	Statute	Wis. Stat. Sec. 144.765	Component of the cleanup program
6	AR		Policy - Currently In Draft		
	LA	1995	Statute - Implementation Pending		
	NM				
	OK	1990	Statute	OK Stat. Ann. Tit 27A: 2-3-506 and 75 OS 1991, Section 309(d)	Component of the cleanup program
	TX	1995	Statute	Texas Solid Waste Disposal Act, Subchapter S, Chapter 361, Health and Safety Code	Alternative cleanup program
7	IA				
	KS				

TABLE V-18
VOLUNTARY CLEANUP AUTHORITIES

Reg	State	Established	Authority	Citation	Relationship to State Program
7	MO	1994	Statute	Mo. Rev Stat. 260.565-260 575	Administered by separate unit, but works with Superfund Section
	NE	1995	Statute	LB 1349, 81-15,181 to 81-15,188	Voluntary cleanup program only
8	CO	1995	Statute	Voluntary Cleanup and Redevelopment Act of 1995 Colorado Revised Statute 25-16-301 et seq.	Voluntary cleanup program only
	MT	1995	Statute	Mont. Code Ann. 75-10-730 - 738 (1989, as amended 1991, 1993, and 1995)	Component of the cleanup program
	ND				
	SD				
	UT	1991	Statute	Utah Code Ann. 19-6-301 et seq.	Component of the cleanup program
	WY				
9	AZ	1992	Statute	Arizona Rev. Stat. Sec. 49-285.B	Component of the cleanup program
	CA	1994	Policy		Component of the cleanup program
	HI				
	NV	1994	Policy		Voluntary cleanup program only
10	AK				
	ID				
	OR	1991	Policy; Guidance		Complements orphan and enforcement programs
	WA	1993	Regulation	WAC 173,340,550 (7)	Alternative cleanup program

TABLE V-19

*

Voluntary Cleanup Programs

SUMMARY

- Twenty-one States define eligibility in terms of who may participate in the program.
- Twelve States define program eligibility by which sites may be included in the program.
- Twenty States use some form of liability or enforcement waivers as program incentives.
- Seven States are more responsive to participant needs or guarantee less oversight.
- Seven States provide some form of financial incentives such as loans, tax credits, State payment of orphan shares, or statutory cost caps.
- Five States will not submit the site to the NPL, will not place the site on the State list, or will take the site off the State list.
- Fourteen States prescribe fees on participants.
- Fifteen States require participants to reimburse the State for all oversight costs.
- Nine States use appropriated funds from a general fund for the programs.
- Two States use funds from the State cleanup fund for the program.

TABLE V-19
VOLUNTARY CLEANUP PROGRAMS

Reg	State	Eligibility	Incentives	Funded by	Fee
1	CT	Owners of establishments (property transfer sites); sites on dynamic inventory, municipalities	Early decision whether DEP or licensed environmental professional will review investigation and cleanup	Filing fees	$2000
	ME	Anyone	Certificate from state	Partially through dedicated account and partially by fees paid by the owner	$500 minimum plus any additional state costs
	MA	Anyone, for covenants not to sue, only prospective purchasers and tenants	Streamlined cleanup process, no waiting for state oversight, clear endpoints; covenants not to sue	Permit fees and compliance fees	Varies
	NH				
	RI	Anyone	Non-RPs can receive covenant not to sue	General program	None
	VT				
2	NJ	Anyone	No Further Action letter	Oversight Fee	Yes
	NY	Owners/operators under certain circumstances; lenders; municipalities	Cleanup levels based on intended use; release from liability	Oversight costs paid by volunteer	None
	PR				
3	DE	All sites	Release from liability for prosective purchasers; No Further Action Letter	Cost recovery for oversight	Reimburse state costs
	DC				
	MD				
	PA	All sites	Waiver of liability if completed in accordance with State standards; Loans from PA Department of Commerce for site assessment	General fund and fees	$250
	VA	Sites where remediation is not mandated pursuant to CERCLA, RCRA (Subtitle C, D, I), Virginia Waste Management Act, or Virginia Water Control Law	Certification of satisfactory completion of remediation gives immunity from future state enforcement action	PRP	Lesser of 1% of remediation cost or $5,000

TABLE V-19
VOLUNTARY CLEANUP PROGRAMS

Reg.	State	Eligibility	Incentives	Funded by	Fee
3	WV				
4	AL	Inactive sites with no current enforcement action	Lower oversight costs and speed	Reimbursable oversight costs	Reimburse state costs
	FL				
	GA				
	KY				
	MS				
	NC	Any PRP	$3,000,000 cap on remedial action costs; avoidance of CERCLA	General Fund	None
	SC	Any PRP or potential purchaser		Contingency Fund, and appropriations	None
	TN	All sites covered by State program	No public hearing; not placed on list; no notice on deed; payment of orphan shares; letter releasing liability; no liens	Fee for service	$5,000 fee and actual costs
5	IL	Non-NPL, non-RCRA, and non-enforcement sites	IEPA is responsive to participant time frames or deadlines	Fee for services rendered	Actual salary expenses plus overhead
	IN	Anyone not under a pending enforcement action or emergency conditions	Certificate of completion; covenant not to sue	Fees and cost recovery	$1000 plus additional state costs
	MI	Anyone	Letters of completion; removal from list of contaminated sites	Publicly funded, unless responsible party enters into an administrative order on consent with the state and agrees to pay for state review	None
	MN	Anyone	Technical assistance (staff review and guidance documents); a menu of liability assurances and financial assistance (by other state agencies)	State appropriations and reimbursement of oversight costs	Approximately $70/hr

TABLE V-19
VOLUNTARY CLEANUP PROGRAMS

Reg	State	Eligibility	Incentives	Funded by	Fee
5	OH	All sites, except NPL sites, sites subject to the solid or hazardous waste laws, the underground storage tank law or those subject to OEPA enforcement action	No state oversight though audits are possible; No Further Action Letters issued by certified private entities; covenants not to sue; loan money available, tax credits	Fees from participants, and professionals and labs seeking certification	Fee chart
	WI	Purchasers who have investigated in accordance with state regulations	Limited liability	Currently unfunded, proposing to collect fees	Proposed
6	AR				
	LA				
	NM				
	OK	All property owners and PRP	Participation could defer or preclude NPL status	By participant	Case by case
	TX	Any site not subject to a permit or order; any person may apply to enter the program	No enforcement action may be initiated once in program; quicker review and approval of low-priority sites; liability protection for lenders and future land owners	Program establishment - State and Federal Funds. Program Operation - Applicant Fees	$1000 ($60 80/hr after expenditure of the fee)
7	IA				
	KS				
	MO	All sites except: imminent and substantial threat; PA/SI performed and awaiting potential NPL listing; RCRA facilities; enforcement action under other laws	"Clean Letter" issued by DNR	Participants pay state costs	Actual staff time x 2 5. $5000 deposit. $200 application fee
	NE	Anyone	Letter indicating that site has been cleaned up to state's satisfaction	PRP	$5000 application fee. $5000 participation fee
8	CO	All sites except UST sites, RCRA sites, NPL sites, and CWA sites	State notice that no further action is needed	Fee	$2000 per site
	MT	Any person or entity	No Further Action Letter	Cost recovery of actual state costs from participant	Reimburse state costs

TABLE V-19
VOLUNTARY CLEANUP PROGRAMS

Reg.	State	Eligibility	Incentives	Funded by	Fee
8	ND				
	SD				
	UT	Any RP	State acknowledgement letter	RPs or state general funds	$60 hour
	WY				
9	AZ	Any person other than the State	Enhances volunteer's cost recovery capability; covenant not to sue possible	Reimbursement from volunteer	Reimburse state costs
	CA	Sites with low threat levels	Sites are not listed and responsible parties have more control over cleanup	Responsible party reimburses state costs, including indirect costs	Reimburse state costs
	HI				
	NV	PRPs	Civil penalties will not be assessed	State cleanup fund	
10	AK				
	ID				
	OR	Anyone wanting to move a cleanup forward	State provides technical assistance; No Further Action Letter	Cost recovery	Hourly rate for staff oversight
	WA	Any PLP who submits a cleanup report with a fee	Timely review of cleanup report and written determination	Fees paid by participants	2% of cleanup costs - $1000 min/$15,000 max.

TABLE V-20

*

Brownfields Programs

SUMMARY

- The number of States with formal brownfields programs is 15.
- Nine of those programs are instituted by statute.
- Seven States are in the process of developing brownfields programs.
- Three States have made their brownfields programs a part of their voluntary cleanup program.
- Five States with no formal brownfields program make their voluntary cleanup program available for such cases.
- Some States' brownfields programs use specific criteria for abandoned sites, while others open brownfields activity to all sites.

TABLE V-20
BROWNFIELDS PROGRAM

Reg.	State	Program	Authority or Approach	Criteria
1	CT	Yes	Statute 22a-133m	sites must be in distressed community and must have a high economic development potential, as determined by the Department of Economic Development
	ME	No		
	MA	Yes	Covenant Not To Sue (CNTS) program and ongoing development of more comprehensive strategy	CNTS program eligibility limited to Economic Target Areas and other projects that provide "exceptional economic development opportunity"
	NH	No	legislation pending	
	RI	Yes	Industrial Property Remediation and Reuse Act	all sites; however, state may provide low interest loans from a "tire site remediation account" for work on "properties of critical economic concern" designated by Department of Economic Development
	VT	Yes	10 V S.A.	abandoned or substantially underutilized properties where development is proposed by independent parties; CERCLA sites are excluded (program starts January 1996)
2	NJ	Yes	Spill Act and S. 1070 (NJSA 58:10B)	any sites; Econ. Development Admin. administers $50M Hazardous Discharge Site Remediation Fund which offers low interest loans for cleanup
	NY	No	voluntary cleanup program available	
	PR	No		
3	DE	Yes	part of voluntary cleanup program	tax breaks for bringing new business and employment to remediated sites
	DC	No		
	MD	No	currently forming program by policy under statutory authority	expected criteria will be low to medium priority sites that can readily be prepared for redevelopment
	PA	Yes	LR&ERSA 35 P.S. Section 6026.101 et seq.	part of the Voluntary Cleanup Program, so all sites are eligible; emphasis on "Special Industrial Areas," defined as orphan sites, sites with bankrupt owners, or within State-designated enterprise zones
	VA	No		

TABLE V-20
BROWNFIELDS PROGRAM

Reg.	State	Program	Authority or Approach	Criteria
3	WV		unknown	
4	AL	No	under development: North Birmingham is a brownfield pilot project	informal, developing guidelines
	FL	No	state provides technical assistance to help expedite cleanup at potential brownfields sites	
	GA	No	none currently; a state representative will introduce brownfields legislation in January 1996	
	KY	No	currently forming program by policy; participating in City of Louisville initiative	within City of Louisville empowerment zone
	MS	No		
	NC	No	receptive to proposals for specific sites	
	SC	No	developing brownfields policy as part of cleanup program	program aimed at non-PRPs
	TN	No	trying to involve brownfield sites in voluntary program;	
5	IL	Yes	statute: Title XVII of Environmental Protection Act; policy	all except those covered by RCRA, NPL, or under court order
	IN	Yes	policy	unused industrial or commercial properties with actual or suspected environmental contaminants
	MI	Yes	statute: PA 451, parts 193, 195 and 201	economically distressed areas and potential for redevelopment; specific criteria for grants
	MN	Yes	carried out under the Voluntary Investigation & Cleanup Program (VIC)	any site involved with an investigation/cleanup being conducted by a voluntary party
	OH	Yes	part of voluntary cleanup program	
	WI	No		
6	AR	Yes	statute: A.C.A. 8-7-523	"abandoned sites" as defined by statute

TABLE V-20
BROWNFIELDS PROGRAM

Reg.	State	Program	Authority or Approach	Criteria
6	LA	No		
	NM	No	seeking to develop a voluntary cleanup program that will also address brownfields	
	OK	No	under development; some sites redeveloped under the voluntary cleanup program	
	TX	No	voluntary cleanup program available	incentives provided to voluntary cleanup program applicants include many of those found in a brownfields program
7	IA	No		
	KS	No		
	MO	Yes	statute: Mo. Rev Stat. 447 700 - 447.718 (economic development program; consultation required with DNR)	must be abandoned for 3 years and be owned by a governmental entity (e.g St. Louis tax forfeiture properties)
	NE	No		
8	CO	No	participating in pilot EPA sites	pilot EPA sites
	MT	No		
	ND	No		
	SD	No	state will assist communities in obtaining federal brownfields grants and funds	
	UT	No	redevelopment of industrial properties is strongly encouraged under the voluntary cleanup program	
	WY	No		
9	AZ	No	targets brownfield sites through its voluntary cleanup program	
	CA	No	targets brownfields through VCP, CalSite Validation Program, Annual Workplan sites, AB 2061 Site Designation, SB 923	

TABLE V-20
BROWNFIELDS PROGRAM

Reg.	State	Program	Authority or Approach	Criteria
9	HI	No		
	NV	No		
10	AK	No		
	ID	No		
	OR	Yes	policy: part of voluntary cleanup program	no specific criteria other than commercial/industrial properties which will be redeveloped after cleanup
	WA	No	independent cleanups, purchaser agreements, repayment agreements	

TABLE V-21

*

Brownfields Sites

SUMMARY

- The number of sites identified through brownfields programs ranges from 0 . (Vermont and Arkansas) to 700 (Minnesota).
- The number of redevelopments underway in brownfields programs ranges from 0 (Alabama, Arkansas, Colorado, South Carolina, Vermont) to 400 (Illinois).
- Committments for redevelopment range from 0 (Alabama, Arkansas, Vermont) to 79 (Michigan -- 58 are Covenant Not to Sue and 21 are site reclamation grants).
- One State noted that two redevelopments have been completed.
- The numbers provided by Illinois, Minnesota, Ohio, and Oregon reflect all their voluntary cleanup program sites, some of which are specifically brownfields.

TABLE V-21
BROWNFIELDS SITES

Region	States	Sites Identified	Redevelopments Underway	Commitments for Redevelopment
1	Connecticut	34	30 (2 have been completed)	30
	Maine			
	Massachusetts	27	27	27
	New Hampshire			
	Rhode Island	10	2	3
	Vermont	0	0	0
2	New Jersey	U	U	U
	New York			
	Puerto Rico			
3	Delaware	19	6	13
	District of Columbia			
	Maryland			
	Pennsylvania	10	10	10
	Virginia			
	West Virginia	U	U	U
4	Alabama	1	0	0
	Florida			
	Georgia			
	Kentucky	1	1	1
	Mississippi			
	North Carolina			
	South Carolina	1	0	1
	Tennessee			
5	Illinois	400-500	400	U
	Indiana	70	70	U
	Michigan	121	70	58 CNTS, 21 site reclamation grants

U = Unknown

TABLE V-21
BROWNFIELDS SITES

Region	States	Sites Identified	Redevelopments Underway	Commitments for Redevelopment
5	Minnesota	700	300	U, but most in program
	Ohio	U	U	U
	Wisconsin			
6	Arkansas	0	0	0
	Louisiana			
	New Mexico			
	Oklahoma			
	Texas			
7	Iowa			
	Kansas			
	Missouri	U	U	U
	Nebraska			
8	Colorado	3	0	3
	Montana			
	North Dakota			
	South Dakota			
	Utah			
	Wyoming			
9	Arizona			
	California			
	Hawaii			
	Nevada			
10	Alaska			
	Idaho			
	Oregon	100+	110+ Active VCP sites	U
	Washington			

U = Unknown

TABLE V-22

*

Federal-State Partnerships

SUMMARY

- The majority of States surveyed, 47, have Site Specific Cooperative Agreements (SSCA).
- Forty-six States have Core Program Cooperative Agreements (CPCA).
- Twenty-seven States have approved Superfund Memoranda of Agreement (SMOA); seven States are negotiating Superfund Memoranda of Agreement.

TABLE V-22
FEDERAL-STATE PARTNERSHIPS

Region	State	SSCA	CORE	SMOA Approved	SMOA Negotiating
1	Connecticut	X	X		
	Maine	X	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		X
	Pennsylvania				
	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	X		
	South Carolina	X	X	X	
	Tennessee	X	X		
5	Illinois	X	X	X	
	Indiana	X	X	X	
	Michigan	X	X	X	

TABLE V-22
FEDERAL-STATE PARTNERSHIPS

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

Chapter VI

*

State Summaries

This chapter presents concise summaries of each State's cleanup program. The States are grouped by U.S. EPA Regions. Ten 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 agencies responsible for 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 1995.

- 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.

- Voluntary and Brownfields Programs - information on State programs for voluntary cleanup of sites and for rehabilitation of industrial sites.

- 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:	2440
Proposed:	0	Identified as Needing Attention:	649
Deleted:	1	On Inventory or Priority List:	11

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 a priority list.

The *Emergency Spill Response Fund*, Conn. Gen. Stat. §22a-451(d) (1982, amended 1995), establishes the response fund, provides enforcement authorities, and allows for replacement of water supplies. The 1995 amendment, P.A.95-208, transferred this fund to the General Fund as of July 1, 1995.

The Transfer of Hazardous Waste Establishments Program, Conn. Gen. Stat. §§22a-134 through 134e (1985), creates a property transfer program. §22a-134 was amended 10/1/95 by PA 95-183.

The 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 transfers.

A voluntary cleanup program was authorized by P.A. 95-190, which also authorized a Licensed Environmental Professionals program.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Protection, Bureau of Water Management, Permitting, Enforcement and Remediation Division includes 51 staff members associated with remedial activities. The Attorney General's office provides legal support with 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 (22%), Federal grants (40%), State Cleanup Fund (37%), and a Fee Fund (2%).

CLEANUP ACTIVITIES

The State inventory of 649 sites includes at least 63 sites that have been cleaned up. Approximately 2440 sites are in the discovery stage, under consideration for listing on the inventory. Several hundred remedial actions are underway at non-NPL sites, 11 of which are State-funded. The State does not have a reliable estimate of the number of RP-funded remedial actions that have been completed since the start of the program. Twelve remedial

actions are underway at NPL sites and none were completed during FY95. Two removal actions are underway at NPL sites. No removals at NPL sites were completed during FY95 and four NPL removals have been completed since the start of the program.

CLEANUP FUNDING

Funding vehicles include the State Superfund and the Urban Sites Remedial Action Fund. Sources for the two funds are general obligation bond funds authorized by Special Acts in 1986, 1987, 1989, 1991, 1993 and 1995. The Emergency Spill Response Fund (ESRF) was transferred into the State General Fund as of 7/1/95, by P.A. 95-208. The ESRF was funded by a generator tax and hazardous waste civil penalties and criminal fines. This fund was administered in, and primarily used by the Oil and Chemical Spills Response Division of the Waste Management Bureau. The ESRF could be used for studies and design, emergency response, removals, remedial actions, and CERCLA match.

The State Superfund had a balance of $7,575,000 at the end of the fiscal year (6/30/95). Nine millon dollars was added to the State Superfund for FY96 and another $9M in bonds is authorized for FY97. The amount spent during FY95 was not available, but the State obligated $4M. The fund monies may be used for site investigation, studies and design, removals, remedial actions, CERCLA match, O&M, grants to local government, and natural resource restoration. 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.

The Urban Sites Remedial Action Fund had a balance of $3M (6/30/95) and $10M was added during FY95. Fourteen million dollars was obligated for non-NPL sites from the USRAF. The fund may be used for the same activities as the State Superfund except CERCLA match, O&M, and grants to local government.

CLEANUP POLICIES AND CRITERIA

Remediation Standard Regulations setting cleanup standards for hazardous waste sites became effective Jan. 30, 1996. These regulations include groundwater and soil cleanup standards, and procedures for establishing criteria for substances for which numerical standards were not adopted. Typically, the risk levels are 10^{-6} and Hazard Index of 1. Background concentrations in excess of numeric criteria may be taken into consideration in certain circumstances. Prior to adoption of the regulations, cleanup criteria were determined on a site-by-site basis, applying water quality criteria and MCLs where appropriate.

PUBLIC PARTICIPATION

The Remediation Standard Regulations provide for public notice and an opportunity for a public hearing when the Commissioner is asked to approve a request by a property owner for an engineered control, such as a cap, to address polluted soil. For State-funded

projects, DEP holds public meetings at various stages of the investigation and cleanup. DEP also keeps local officials informed of the status of State-funded projects.

ENFORCEMENT

Liability

Legal authorities available include strict, joint and several, and retroactive liability, orders for information and site access, subpoena authority, administrative and consent order authority, injunctive action and cost recovery authority. Civil penalties of $25K per day are available under the hazardous waste program, 1½ 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

The Commissioner is authorized to pursue natural resource damage claims, but no Natural Resource Damages program has been established.

Property Transfer

The Property Transfer Act requires sellers to investigate and disclose the presence of hazardous substances on a contaminated site at the time of transfer and requires that a party to the transfer accept responsibility for implementing required remedial measures. There is also a State-maintained database of known or listed sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has a voluntary cleanup program (established October 1, 1995, by PA 95-183, §3) in which owners of establishments (property transfer sites), sites on the dynamic inventory, or municipalities can participate. The DEP decides whether the DEP or a licensed environmental professional will review the investigation and cleanup. The program is financed by filing fees. The State's brownfields program is established by statute, §22a-133m. To be included, sites must be in distressed communities, and must have a high economic development potential, as determined by the Department of Economic Development. Thirty four sites have been included in the program, 25 of which are private party funded. Cleanup is underway at 30 sites, and two sites have been completed.

FEDERAL/STATE PARTNERSHIPS

For FY95, Connecticut has a CPCA and SSCAs with U.S. EPA.

MAINE

SITES

NPL Sites		State Sites	
Final:	11	Known and Suspected:	419
Proposed:	1	Identified as Needing Attention:	92
Deleted:	0	On Inventory or Priority List:	419

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, Ch. 81, L.D. 156 (May 6, 1991) protects innocent landowners from liability for cleanups of spills caused by others.

P.L. 355, 1993, Maine Rev. Stat. §§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 of Solid Waste Control, Division of Site Investigation and Remediation, has 21 staff members. One and one-half positions in the Attorney General's office are devoted to Superfund-type enforcement activity. DEP also works with the Bureau of Health in conducting risk assessments and lab work. Funding for administration comes from Federal grants (29%), State cleanup funds (61%), and the State general fund (10%).

CLEANUP ACTIVITIES

Maine has four remedial actions underway at NPL sites. Two NPL remedial actions have been completed since the start of the program, one of them in FY95. Twelve removals have been completed at NPL sites since the start of the program, two of them in FY95. At non-NPL sites, five remedial actions are underway. Seven remedial actions were completed at non-NPL sites during FY95 and 17 have been completed since the start of the program. Three removals were completed at non-NPL sites during FY95, and 31 have been completed since the start of the program.

CLEANUP FUNDING

Maine uses two accounts for cleanup funding: (1) The Uncontrolled Sites Bond Account, which contained approximately $5M, as of 10/95; and (2) The Uncontrolled Sites Fund, which contained $4.5M as of 10/95. Expenditures from the Bond Fund totalled

$301,295 in FY95 and the State obligated an additional $85,830 from the Bond Fund. No funds were added to the Bond Fund during FY95. The State spent $430,762 from the Uncontrolled Sites Fund during FY95 and $425,787 was added to it during the fiscal year. Both funds may be used for site investigation, emergency response, removals, studies and design, remedial actions, natural resource restoration, O&M, grants to local government, program administration, and CERCLA match. Cleanup of closed municipal landfills is financed through a separate bond fund and statutory authority.

CLEANUP POLICIES AND CRITERIA

Maine determines cleanup levels on a case-by-case basis. Risk to human health, future water uses, MCL/MCLGs 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, and retroactive liability, orders for information, site access and remediation orders, administrative order authority, cost recovery, liens and punitive (treble) damages. The Commissioner must designate a site for a 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. Recovered funds may be used for program administration and NRD assessment as well as to restore or replace damaged resources.

Property Transfer

Maine's 1993 amendments require auditors to disclose to a 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 for cleaned up property, with priority over any lien filed after the date of the law. State liens on other property have normal priority.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State's voluntary program (38 MRSA §§343-E and 343-F) is an alternative to the State Cleanup Program. Some monies are dedicated to fund the State's participation, and participants pay a $500 application fee and are charged for time spent by the State. Site owners are able to get full or partial liability releases depending on what was done at the site. Incentives for participation include: getting sites back into economic use and getting a certificate from the State stating cleanup was completed to the State's satisfaction.

The State has no brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Maine has a CPCA, a SMOA, and SSCAs with U.S. EPA.

MASSACHUSETTS

SITES

NPL Sites		State Sites	
Final:	30	Known and Suspected:	7,500
Proposed:	0	Identified as Needing Attention:	4,500
Deleted:	1	Priority List (Tier I sites):	380

STATUTORY AUTHORITIES

The *Massachusetts Oil and Hazardous Material Release Prevention and Response Act*, Mass. Gen. Law c. 21E (1983, as amended in 1986, 1992 and 1994), provides for strict, joint and several liability; retroactive 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; permits for certain response actions; permit and annual compliance assurance fees; covenants not to sue; contribution protection; mandatory dispute resolution mechanism for contribution claims; right-of-entry for private parties conducting response actions; limitations to liability for secured lenders, fiduciaries, and municipalities; exemption from liability for innocent homeowners; and Commonwealth acquisition of property and recording of restrictive covenants.

PROGRAM ORGANIZATION

The Department of Environmental Protection's Waste Site Cleanup Program has 206 full time equivalents. 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, fourteen attorneys from DEP's Office of General Counsel and five attorneys in the Attorney General's office provide enforcement support, and scientists in DEP's Office of Research and Standards provide risk assessment support at specific sites and in regulation and policy development. The Program is funded by the State General Fund (56%), federal grants (27%), and other sources (17%).

CLEANUP ACTIVITIES

More than 3,200 assessments and cleanups have been completed at non-NPL sites and spills in Massachusetts since the cleanup program was overhauled in 1993. One hundred twenty-six remedial actions are currently underway at non-NPL sites. During the last two fiscal years 2,230 removals have been completed at non-NPL sites. One NPL site has been de-listed and 17 remedial actions have been completed at NPL sites since the start of the program. Three remedial actions were completed at NPL sites during the 1995 fiscal year (FY95), and 15 remedial actions are currently underway at NPL sites.

CLEANUP FUNDING

Bonds fund public response actions. DEP has spent about $85M since 1983; an additional $100M was authorized for the program in November 1995. Bond funds may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, and grants to citizen groups and local government for technical assistance. Hazardous waste transporter fees (approximately $6M/yr) are used for debt service. A total of $9.5M was expended from the Bond Fund during FY95 (7/1/94 - 6/30/95), $7.5M for non-NPL sites and $2M for NPL sites.

CLEANUP POLICIES AND CRITERIA

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

Regulations (the Massachusetts Contingency Plan) establish three methods for characterizing risk at disposal sites. One method relies on numeric cleanup standards for 105 chemicals in three groundwater categories and three 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 cancer risk limit is a cumulative excess lifetime cancer risk of one in one hundred thousand (10^{-5}). The noncancer risk limit is expressed as a Hazard Index equal to 1, and 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 classifications of disposal sites and applications for Tier I permits for response actions. When citizens petition for community involvement in response actions, a Public Involvement Plan must be prepared. 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 required public involvement activities.

ENFORCEMENT

Liability

Massachusetts has strict, joint, and several liability. Liability is also retroactive. 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 (95%), which program staff attribute to the statute's provisions for priority liens, treble costs and annual compliance assurance fees which are assessed for every year 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.

Natural Resources Damages

Massachusetts' natural resource damages program began in 1983, and a total of $22.6M has been recovered by Federal and State trustees at 4 NPL sites. Two restoration actions are in the planning process.

Property Transfer

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

VOLUNTARY AND BROWNFIELDS PROGRAMS

Massachusetts' statute authorizes voluntary cleanups as an integral part of the cleanup program. Anyone is eligible to participate in a voluntary cleanup. Incentives for participating in the program include a streamlined cleanup process, no waiting period for State oversight, and clear endpoints. Funding for the State's activities comes from permit fees and compliance fees.

The State's brownfields program is based on the authority to offer covenants not to sue to parties conducting voluntary cleanups. The State currently limits covenants not to sue to prospective purchasers and tenants planning to reuse sites in Economic Target Areas or other projects that provide "exceptional economic development opportunity." Covenants have been signed for 15 sites and 12 more are pending; all 27 have redevelopment commitments. A brownfields task force currently is looking at expanding the covenant not to sue program.

FEDERAL/STATE PARTNERSHIP

For FY95, Massachusetts has one MSCA covering 22 sites; one Pilot Project to Integrate the Federal and State Site Assessment and Removal Programs; two site-specific CAs; six TAGs; one CPCA; and one SMOA in negotiation.

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 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. 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 Compliance Bureau is primarily responsible for Federal and State Superfund work and has 4½ FTE staff funded or partially funded by the HWCF. The Attorney General's Office provides legal support (a total of three 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 has been used for emergency removal activities and for various hydrogeological studies at sites in the preliminary stages of investigation. New Hampshire has nine NPL sites where remediation is underway and one NPL site where removal is currently underway. No remediations have been completed at NPL sites since the start of the program. Ten removals at NPL sites have been completed since the program started.

CLEANUP FUNDING

The HWCF has a balance of $3M (as of 6/95). 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 6/95. 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 1995. The statute (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 6/95, 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

There are no formal public participation 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 clean up a site, may impose criminal penalties, and may bring action to recover costs.

Natural Resource Damages

The State has no natural resource damages program.

Property Transfer

New Hampshire has a first priority lien (superlien) 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. The State maintains a database of known or listed sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The New Hampshire statute provides for a voluntary cleanup program, but no information on the program was available.

New Hampshire does not currently have a brownfields program. However, as of 1/4/96, brownfields legislation was pending in the State Legislature.

FEDERAL/STATE PARTNERSHIP

For FY95, New Hampshire has a CPCA and SSCAs with U.S. EPA.

RHODE ISLAND

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	300
Proposed:	0	Identified as Needing Attention:	40
Delisted:	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).

The *Industrial Property Remediation and Reuse Act*, R.I. Gen. Laws §§ 23-19.14-1 through 23-19.14-19 (1995) provides for voluntary cleanup, and clarifies enforcement authorities and public participation.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Management, Division of Site Remediation, has 30 FTE staff. In-house legal support is provided by one attorney. Federal grants provide 46% of funding for staff and administration, with the remainder coming from State cleanup funds and the State general fund.

CLEANUP ACTIVITIES

Remedial actions are underway at 40 non-NPL sites. Remedial actions have been completed at 20 non-NPL sites, including 10 during the last fiscal year. Twelve removals have been completed at non-NPL sites, including three during the last fiscal year.

Remedial actions are underway at five NPL sites. Remedial actions have been completed at three NPL sites, including one during the last fiscal year.

CLEANUP FUNDING

At the end of the fiscal year the Environmental Response Fund had a balance of $2,655. During the year, it received additions of $1,556,000, and paid out $2,350,000. Twenty seven thousandwas encumbered during the fiscal year. The primary source of the fund is bonds, with smaller contributions from cost recoveries and penalties and fines. The fund is supposed to be self-perpetuating, but cost recoveries have been lagging. The bond fund has been exhausted.

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

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs/MCLGs, background levels, groundwater standards, risk assessment, and EPA guidelines may be used. Groundwater cleanup standards are based on a statewide classification system. The State is developing generic risk-based soil standards. Risk levels used for risk assessment are 10^{-6} for carcinogens and HI=1 for non-carcinogens.

PUBLIC PARTICIPATION

The State has adopted statutory requirements for public participation in non-NPL site cleanups.

ENFORCEMENT

Liability

Legal authorities include "absolute" liability (interpreted as strict, joint and several). Liability is retroactive. The State has subpoena authority, administrative orders, injunctive action, civil and criminal penalties, cost recovery, and treble damages. Civil penalties of up to $10K/day are available.

Natural Resource Damages

The State has authority under § 23-19.1-22(c), and started its program in 1995. One claim under CERCLA is pending.

Property Transfer

Property transfer provisions consist of disclosure on deed that a site is or was contaminated, where an unremedied violation occurs. The provision is part of the State Hazardous Waste Management Act. An inventory of sites is maintained.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Voluntary cleanups are handled under the normal cleanup program. Although anyone is eligible, non-PRPs can get a covenant not to sue as part of the cleanup.

Brownfields cleanups are handled under the Industrial Property Remediation and Reuse Act. Any site may qualify. Ten sites are currently in the program; cleanups are underway at two sites, and redevelopment commitments exist at three sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Rhode Island has a CPCA and SSCAs with the U.S. EPA.

VERMONT

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	1700
Proposed:	1	Identified as Needing Attention:	931
Deleted:	0	On Inventory or Priority List:	1700

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.

The *Waste Management Act*, Vt. Stat. Ann. Title 10, §§6601-6618 (1977, as amended 1981, 1985, 1987 and 1995), 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, Waste Management Division, Hazardous Sites Management Section has 14 FTE staff members. That section handles all hazardous waste work including CERCLA, RCRA, pre-remedial and State list work. Four attorneys in the Attorney General's office, two attorneys in DEC's Enforcement Division, and one Program Attorney work on hazardous waste cases. Staff and administrative costs come from Federal grants (75%), appropriations (23%) and the State cleanup funds (2%).

CLEANUP ACTIVITIES

Remedial actions are currently underway at two NPL sites and at 200 non-NPL sites. In the last fiscal year, one remedial action was completed at an NPL site and 60 were completed at non-NPL sites. One remedial action at an NPL site has been completed since the start of the State program. At non-NPL sites, 724 remedial actions have been completed since the start of the State program. Two removals have been completed at non-NPL sites since the start of Vermont's State program. Information for removals at NPL sites was not available.

CLEANUP FUNDING

The Environmental Contingency Fund (ECF) had a balance of $840K at the end of FY95. Additions amounting to $450K were made to the fund during the fiscal year. A total of $500K was expended at non-NPL sites from the ECF. No monies were obligated or encumbered during FY95. A hazardous waste generator tax constitutes the major source of revenue for the fund, with minor revenue from cost recoveries and interest. The ECF can be used for site investigation, studies and design, removals, emergency response, remedial

actions, natural resource restoration, CERCLA match, operation and maintenance, grants to local government, and program administration.

The Petroleum Cleanup Fund (PCF) had a balance of $3M with $4M collected in FY95. During FY95, Vermont spent $5.2M from the PCF on non-NPL sites. The PCF is generated by an annual tank assessment fee required to be paid by UST owners as well as by a one cent per gallon fuel license fee charged to distributors of gas or diesel fuel. It also receives cost recoveries and interest.

The PCF fund can be used for site investigation, emergency response, studies and design, remedial actions, removals, victim compensation, operations and maintenance, program administration, and natural resource restoration.

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, EPA guidelines, and background quality to determine cleanup levels. Currently, the State is developing procedures for determining cleanup standards on a site-specific basis. Risk levels are also determined on a site-specific basis and are usually in the range of 10^{-4} to 10^{-6}.

PUBLIC PARTICIPATION

DEC meets with town officials and holds public meetings. There is a statutory requirement (V.S.A. 6608 (d)) to notify municipalities of sites within their borders; site designation must be entered on the town's land record. UST regulations also require public notice of corrective action.

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, proportional, and 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 go 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Vermont does not have a voluntary cleanup program although the State does encourage and support voluntary cleanups.

The State does have a brownfields program (established by 10 V.S.A. 6615), which commenced in January 1996. Properties that are abandoned or substantially underutilized and where development is proposed by independent parties are covered by this program. CERCLA sites are excluded.

FEDERAL/STATE PARTNERSHIPS

For FY95, Vermont has a CPCA and a SMOA with U.S. EPA.

REGION II

New Jersey
New York
Puerto Rico

NEW JERSEY

SITES

NPL Sites		State Sites	
Final:	108	Known and Suspected:	20,000
Proposed:	0	Identified as Needing Attention:	6,500
Delisted:	7	On Inventory or Priority List:	-

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), establishes a Fund for cleanups and provides authority for emergency response, removals, remedial actions, enforcement, cost recovery, victim compensation, and damages.

The *Industrial Site/Recovery Act* (ISRA) (1993), renamed and 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.

S.1070 (no name) was the 1993 law that included ISRA; however, it also added substantial authorities for cleanup, including new cleanup funds for loans to private parties and loans and grants to municipalities.

Additional authority is provided by the State's *Hazardous Discharges Law*, N.J.S.A. §§13:1k-15 through 13:1k-19 (1984) and the *Underground Storage of Hazardous Substances Act*, N.J.S.A. §§58:10A-21 *et seq.*

PROGRAM ORGANIZATION AND FUNDING

The Site Remediation Program in the Department of Environmental Protection and Energy (DEPE) has 650 staff members. The Attorney General's Office (Department of Law and Public Safety, Division of Law, Environment Section) provides 23 attorneys for legal support of the program. Funding for staff and administration comes from the Spill Compensation Fund, PRP reimbursements, and the State's bond fund. A small amount of funding comes from federal grants.

CLEANUP ACTIVITIES

The State formerly maintained a priority list, but is now in the process of adopting regulations to legally support a priority list. New Jersey's "known contaminated site list" contains approximately 6,500 sites.

The State reports 9,276 ongoing remedial actions at non-NPL sites; 2,366 during last fiscal year; and 12,004 since start of program.

At NPL sites, 104 remedial actions are underway; nine have been completed since the start of the program, including two during the last fiscal year.

CLEANUP FUNDING

New Jersey's Spill Compensation Fund, generated by a transfer tax, penalties, appropriations, cost recoveries, and interest, had a balance of $5.5M at the end of FY95. Fund activities during FY95 consisted of $25.3M in additions, $29M in expenditures and $5.6M in obligations. Expenditures and obligations were almost entirely for non-NPL actions; expenditures for NPL sites were $550K, and obligations for NPL sites were $100K. 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. The Spill Fund also has a Natural Resources Damages sub-account, which contains $2.3M and which received $1.1M during the last fiscal year; this sub-account holds funds for use in natural resource restoration.

The Hazardous Discharge Site Cleanup Fund, consisting primarily of cost recoveries and interest, had a balance of $0 at the end of the fiscal year. This Fund's activities during FY95 consisted of $27.1M in cost recoveries. It expended $600K during the same period.

New Jersey's Bond Fund had a balance of $86.6M at the end of the fiscal year, with revenue of $8.5M and expenditures of $8M. A total of $56.9M of the Bond Fund was obligated during the fiscal year for site cleanups. Essentially the Bond Fund is almost entirely encumbered.

The Sanitary Landfill Contingency Fund had a balance of $39.6M, and received revenues of $3.8M. It paid out no funds during the fiscal year. It is designed to provide for victim compensation and for closure of abandoned landfills.

The Remediation Guarantee Fund had a balance of $5M, with no additions or expenditures. It was created by appropriation of bond funds, and is intended to cover defaults on cleanups subject to administrative consent orders.

The Hazardous Discharge Site Remediation Fund (not to be confused with the similarly named Hazardous Discharge Site Cleanup Fund) is not, strictly speaking, a State cleanup fund. This $50M fund was created by the legislature by reprogramming 1993 bond funds. Administered by the State's Economic Development Authority, it provides low interest loans to PRPs and others to assist in cleanups; it also provides grants to municipalities.

CLEANUP POLICIES AND CRITERIA

The State has statutory cleanup standards, and also uses water quality criteria, MCLs and MCLGs, background levels, risk assessment, EPA guidelines, and the State's soil cleanup criteria (SCC) guidelines. The risk level set by statute is 10^{-6}, and is effective pending review by an independent commission. For soil cleanup, the State may use the non-promulgated SCC or determine case-specific levels by risk assessment. 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 laws, rules and procedures provide for notice, comment, hearings, and participation.

ENFORCEMENT

Liability

Liability is retrocactive, strict, joint and several. Civil penalties are authorized up to $50K per day per violation (and up to $1M for discharges, based on substance and quantity); treble damages may be assessed through cost recovery actions.

Natural Resource Damages

The Spill Act provides State authority to seek natural resource damages. A formal program was inaugurated July 1, 1993. One State NRD recovery has occurred, and five CERCLA NRD recoveries (valued at $6.7M). There are five CERCLA and one State-based NRD claims currently pending.

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 (super)lien for its cleanup costs.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State's voluntary cleanup program is fully integrated into its other programs. The DEPE will provide a "no further action letter" upon completion of successful voluntary cleanup. The program was established by regulation. Low interest loans are available to PRPs and others. The State charges an oversight fee.

The State also operates a brownfields program under general regulatory authority. As noted above, the low interest loan fund is administered by the Economic Development Authority. Several municipalities, including Bayonne and Phillipsburg, received grants from this fund to assess abandoned sites for reuse.

FEDERAL/STATE PARTNERSHIPS

For FY95, New Jersey has a CPCA and SSCAs with the U.S. EPA.

NEW YORK

SITES

NPL Sites		State Sites	
Final:	81	Known and Suspected:	929
Proposed:	0	Identified as Needing Attention:	793
Delisted:	7	On Inventory or Priority List:	929

STATUTORY AUTHORITIES

The *Environmental Conservation Law*, Articles 17, 19, 27, 71, provides general, comprehensive enforcement and cleanup authority. Article 27, title 13, is the *Abandoned Sites Act of 1979 (Chapter 282)*, which 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* (EQBA) (Ch. 511, Laws of 1986), authorized $1.2B in bonds to address inactive hazardous waste sites, $100M of which was later redirected for use in cleaning up nonhazardous waste landfills.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Conservation (DEC) has approximately 289 FTE staff members working on State and Federal Superfund activities. Most of the personnel work in the Division of Hazardous Waste Remediation. Legal support is provided by 15 attorneys in the Division of Environmental Enforcement and three attorneys in the New York Attorney General's Office.

Approximately 92% of funds for staff and administration are from the cleanup fund, 7% are from federal grants, and 1% is from the State general fund.

CLEANUP ACTIVITIES

Remedial actions are underway at 52 non-NPL sites. Remedial actions have been completed at approximately 192 non-NPL sites, including 21 during the last fiscal year. Removals are underway at approximately 27 non-NPL sites. Removals have been completed at approximately 404 non-NPL sites, including 44 during the last fiscal year.

Remedial actions are underway at 22 NPL sites. Remedial actions have been completed at 57 NPL sites, including seven during the last fiscal year. Four removals are underway at NPL sites. Approximately 52 removals have been completed at NPL sites since the beginning of the program, including eight during the last fiscal year.

CLEANUP FUNDING

In 1989, the State began selling EQBA bonds. $594M remains in the fund. During the last fiscal year, $79.5M was expended (all but $100K on non-NPL cleanups). A total of $123.5M was obligated. The bond money can be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, grants to local government, and program administration.

The Hazardous Waste Remedial Fund had a balance of $5.1M as of 3/31/95. During the last fiscal year, $51.6M was added to the fund and $49.9M was paid out. The bulk of this funding comes from waste end taxes. The Fund is used for debt service of 1986 EQBA bonds A small portion of the money is used for program administration.

A substantial amount of cleanup funding is provided by PRPs. The State reports a total of 590 consent orders to date, valued at approximately $1.75B in cleanup commitments.

CLEANUP POLICIES AND CRITERIA

Cleanup levels are established by water quality criteria, MCLs/MCLGs, background levels, risk assessment, groundwater standards, 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

State regulations defining responsible party result in strict, joint and several liability. The statute makes common law defenses available. Liability is retroactive. Legal authorities include orders for information and site access, subpoena authority, administrative order authority, consent order and injunctive action authority. Civil penalties are $25K per violation in addition to $25K per day for continuing violations. Criminal penalties of up to

$25K per day and/or one year imprisonment are available. Penalties double for a second violation. Cost recovery is also authorized.

Natural Resource Damages

Natural resource damages are recoverable under the *Navigation Law, the Environmental Conservation Law*, and common law. A formal natural resource damages program was authorized in 1990 within DEC and got underway in 1993. It has recovered more than $20M, mostly under CERCLA authority. Six natural resource restorations are underway.

Property Transfer

New York is required to maintain a priority list of sites. Also inactive hazardous substance sites must be recorded with the recorder of deeds.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State maintains a separate voluntary cleanup program, established in December 1994 by Organization and Delegation Memorandum 94-32. Site owners, prospective purchasers, municipalities, and (under some circumstances) operators may participate. Cleanup levels are based on the intended use of the site; a release from liability is issued after the cleanup levels are reached. State oversight costs are paid by the volunteer.

There is no separate brownfields program, but the voluntary cleanup program serves this objective.

FEDERAL/STATE PARTNERSHIPS

For FY95, New York has a CPCA and SSCAs with the U.S. EPA.

PUERTO RICO

SITES

NPL Sites		State Sites	
Final:	9	Known and Suspected:	256
Proposed:	1	Identified as Needing Attention:	256
Delisted:	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*, Law 9, L.P.R. Ann., tit. 12, § 1121 *et seq.* (1970, as amended 1973, 1974, 1978, 1983, 1984, 1985, 1993).

PROGRAM ORGANIZATION AND FUNDING

The Emergency Response and Superfund Area of the Environmental Quality Board has 22 FTE staff working on cleanup activities. Legal support is provided by one attorney from the Environmental Quality Board's Legal Division. Federal grants provide 90% of funding for staff and administration.

CLEANUP ACTIVITIES

One remedial action and one removal action are underway at non-NPL sites. No other remedial actions or removals have occurred at non-NPL sites. At NPL sites three remedial actions are underway and one removal has been completed since the start of the program.

CLEANUP FUNDING

The Environmental Emergencies Fund ended the fiscal year (6/30/95) with $2,482,110. The Fund received $1,100,109, mostly from bond proceeds. It is allowed to receive cost recoveries and penalties. In the fiscal year just ended, $986,716 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 promulgated cleanup standards, water quality criteria, MCLs and MCLGs, background, EPA guidelines, groundwater and soil standards for cleanup standards.

PUBLIC PARTICIPATION

No formal procedures exist. Public meetings and other public participation are conducted in accordance with the NCP for NPL sites or EPA removal actions.

ENFORCEMENT

Liability

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

Natural Resource Damages

Both laws authorize recovery for natural resource damages. Damages have been sought only for oil spills.

Property Transfer

No law.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Puerto Rico has neither voluntary nor brownfields cleanup programs.

FEDERAL/STATE PARTNERSHIPS

For FY95, Puerto Rico has a CPCA and SSCAs with the 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:	280
Proposed:	0	Identified as Needing Attention:	120
Deleted:	2	On Priority List:	120

STATUTORY AUTHORITIES

The *Hazardous Substance Cleanup Act*, DCA, Tit. 7, §9101-9120 (1990, as amended 1995), provides the authority for emergency response, removals and remedial actions, cost recovery and damages, a voluntary cleanup program, and establishes a fund for site cleanup.

The *Delaware Regulations Governing Hazardous Substance Cleanup* (1993, revised 1995) 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 30 staff members. Legal support is provided by the Attorney General's office with one attorney assigned to both State and CERCLA work.

The sources of administrative funds are federal grants (50%), the Delaware General Fund (10%), and the Hazardous Substance Cleanup Fund (40%).

CLEANUP ACTIVITIES

Remediation is currently underway at four NPL sites. Eight NPL sites have been fully remediated since the start of the program. Three remedial actions were completed during the 1995 fiscal year (FY95). Two NPL removals were completed in FY95, one is currently underway, and five removals have been completed since the start of the program.

No remediations or removals are currently underway at non-NPL sites. One remedial action and one removal at non-NPL sites were completed during FY95, and two remediations and 14 removals have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substance Cleanup Fund had a balance of $3.7M at the end of the fiscal year (6/30/95). Additions to the Fund totaled $4.4M in FY95. Expenditures for activities at non-NPL sites totaled $2.0M. There were no funds obligated during FY95.

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, natural resource restoration, CERCLA match, and operation and maintenance.

CLEANUP POLICIES AND CRITERIA

The State has adopted cleanup regulations (1993, revised 1995) 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. If the PRP can not perform risk assessment, the State allows the use of risk based concentration tables put out by U.S. EPA Region III.

MCLs may be used as the groundwater cleanup levels if the DNREC determines they are 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. If the PRP can not perform risk assessment, the risk level from the U.S. EPA Region III concentration tables of 10^{-6} is used. The same rule applies to soil cleanup levels. Surface water cleanup levels must meet the State's water quality standards.

PUBLIC PARTICIPATION

The *Hazardous Substance Cleanup Act* provides for public notice and opportunity for public comment on proposed consent decrees, settlement revisions, and proposed and final remedial action plans; public hearings and meetings; and document availability.

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 an enforcement action, unless an emergency exists. The State has injunctive action and administrative order authority. Civil penalties of up to $10K per day per violation are available. The State may recover punitive damages, treble the State's cleanup costs.

Natural Resource Damages

The State natural resource damages program is set forth in the *Delaware Regulations Governing Hazardous Substance Cleanup*. The program covers 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, and $400K has been spent for natural resource restoration at one site.

Property Transfer

The *Hazardous Substance Cleanup Act* (§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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The 1995 amendments to the *Hazardous Substance Cleanup Act* included provisions for a voluntary cleanup program. Anyone can participate, but cleanups must comply with the *Delaware Regulations Governing Hazardous Substance Cleanup*. Participants receive a certificate of completion, and prospective purchasers receive a release from liability. To fund the State's oversight, participants are required to remit a $5K deposit. Any deposit funds not expended by the State are returned to the participant. If the oversight costs exceed $5K, the participants are required to pay the excess costs.

The State brownfields program is part of the voluntary cleanup program with added provisions for bringing business and employment to the site after the completion of cleanup. Participants receive tax credits based on the size of investment and number of new employees brought to the site. Grants of up to $25K are available for site investigation and cleanup. Six cleanups are currently underway and thirteen sites have commitments for redevelopment.

FEDERAL/STATE PARTNERSHIPS

For FY95, Delaware has a CPCA, a SMOA, and a SSCA with U.S. EPA.

DISTRICT OF COLUMBIA

SITES

NPL Sites		State Sites	
Final:	0	Known and Suspected:	30
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, of which one is an attorney. The Corporation Counsel also provides legal support as needed.

The District's program is currently funded through Federal grants (75%), and from the District Government General Fund (25%). They have authority to set up a fee schedule to fund their hazardous waste and toxic chemical source reduction program.

CLEANUP ACTIVITIES

The District does not have any NPL sites and does not have a cleanup program for non-NPL sites. Removals are carried out occasionally at non-NPL sites with two currently underway and five completed during the last fiscal year.

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 standards of 100 pm for total petroleum hydrocarbons in soil, 10 ppm for BTEX in soil, and 1 ppm for benzene in soil. Where it is not feasible to use regulation standards, risk assessment may by required, using EPA protocols, to prove that human health and the environment are adequately protected.

PUBLIC PARTICIPATION

The District has no formal public participation requirements. However, 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 per day per violation, no punitive damage authority, and no specified liability standards.

Natural Resource Damages

The District does not have a natural resource damages program.

Property 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The District does not have a voluntary cleanup program or a brownfields program.

FEDERAL/STATE PARTNERSHIPS

The District does not have any federal/State partnership agreements.

MARYLAND

SITES

NPL Sites		State Sites	
Final:	13	Known and Suspected:	463
Proposed:	1	Identified as Needing Attention:	198
Deleted:	1	On Inventory or Priority List:	
Delisted:	1		

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 Restoration and Redevelopment Program has two divisions involved in the Superfund process: Site Assessment/State Superfund Division, with approximately nine full-time staff, and the Federal Facilities and NPL Division, with 13 full-time staff. The Attorney General's office has staff located at MDE; two 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 eight full-time employees.

Funding for the State's Superfund program comes about 10% each from the State general fund and the State cleanup fund and about 80% from Federal grants.

CLEANUP ACTIVITIES

In 1995, all of the activities at non-NPL sites were paid for by responsible parties. Five of the NPL sites are federal facilities, while 33 of the State sites are federal facilities. No more information on cleanup activities was available.

CLEANUP FUNDING

The current information on cleanup funding was unavailable.

CLEANUP POLICIES AND CRITERIA

Where appropriate, the State applies water quality criteria, MCLs/MCLGs, risk standard assessment, background levels, EPA guidelines, groundwater standards, and soil standards. Maryland applies these criteria on a site by site basis as appropriate. Risk levels are based on EPA published standards and Region III guidance as appropriate and available.

PUBLIC PARTICIPATION

There are some statutory requirements for hearings, document availability and policy requirements for notice and public comment. Community involvement is encouraged if there is interest. All consent orders have a community involvement section and 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. Under State law, the State program can impose liability for cleanup of substances disposed of before the date the program was enacted. The State has civil penalty authority up to $25K per violation. There are no punitive damages available.

Natural Resource Damages

The State's natural resource damage 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State does not have a voluntary cleanup program. However, a Voluntary Cleanup Task Force was established in the summer of 1995, and a voluntary cleanup program may be implemented. Also, a voluntary cleanup program/brownfields bill was introduced into the Maryland Legislature in early 1996.

There is no current brownfields program either, but the Department is currently developing a program by policy within the scope of the current statute and regulations. The State has a Cooperative Agreement with EPA to do brownfields assessment on existing sites. The criteria for inclusion in the State program are expected to be low to medium priority sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Maryland has a CPCA and SSCAs with U.S. EPA, and is negotiating a SMOA.

PENNSYLVANIA

SITES

NPL Sites		State Sites	
Final:	100	Known and Suspected:	100
Proposed:	2	Identified as Needing Attention:	50
Deleted:	8	On Inventory or Priority List:	12

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.

The *Land Recycling and Environmental Remediation Standards Act*, (LR&ERSA) (Act 1995-2), 35 P.S. §6026.101 *et seq.* establishes state-wide cleanup standards, a voluntary cleanup program and a brownfields program.

PROGRAM ORGANIZATION AND FUNDING

The Land Recycling and Cleanup Program in the Department of Environmental Protection (DEP) handles hazardous substance cleanup, and has a staff of 120. Legal support is provided by the Superfund Enforcement Division of the DEP Chief Counsel's Office with 12 full-time attorneys. The State Fund provides 100% of administrative costs.

CLEANUP ACTIVITIES

Remediation is currently underway at 30 NPL sites with eight NPL sites having been fully remediated since the start of the program. Currently, remediation is underway at three non-NPL sites while two sites have been fully remediated since the start of the State program. Removals have been completed at 60 non-NPL sites since the start of the program, ten during FY95.

CLEANUP FUNDING

The Hazardous Sites Cleanup Fund had a balance of $75M at the end of FY95. Additions to the Fund during FY95 totaled $51M. $42M was generated from a capital stock and franchise tax. Hazardous waste transportation and management fees provided the Fund with $3M. Minor sources of Fund monies were interest, penalties, and cost recoveries. Expenditures from the Fund in FY95 totaled $6M for the NPL portion and $10M for the non-NPL portion of the program. Obligations from the Fund in FY95 were $10M for the NPL portion and $13M 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

State-wide cleanup standards are set by the LR&ERSA. In general, the State considers water quality criteria, MCLs/MCLGs, background levels, risk standard assessment, groundwater standards, and soil standards. DEP can apply state-wide cleanup standards or select site specific risk-based responses that include engineering and institutional controls. The levels used for risk assessments are 10^{-4} to 10^{-6}.

PUBLIC PARTICIPATION

Pennsylvania has a statutory requirement for public notice, provision for public comment, hearings and meetings, document availability, and grants to citizen groups. 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.

Community Relations Coordinators perform additional public participation functions on an *ad hoc* basis.

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 per day and a maximum of $25K per day. Liability is strict, joint and several, and retroactive. HSCA also 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 DEP 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 State natural resource damages (NRD) program or policy exists at present. NRD claims have been filed at two NPL sites under CERCLA, as part of cost recovery actions.

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. The seller must also disclose the presence of hazardous substances on the site before transfer. This requirement is waived if cleanup is completed to state-wide standards.

VOLUNTARY AND BROWNFIELDS PROGRAMS

LR&ERSA establishes the voluntary cleanup program. The program is open to all sites, and maintains statewide standards for cleanup. Loans from the Department of Commerce are available for site assessment. State participation is funded through the General Fund and by a $250 fee.

Cleanups of brownfields are voluntary cleanups that take place in "special industrial areas," defined as orphan sites or sites within State-designated enterprise zones. All other facets of the program are identical to the voluntary cleanup program. The State has identified ten sites for inclusion in the program, and ten cleanups are currently underway.

FEDERAL/STATE PARTNERSHIPS

For FY95, Pennsylvania has no Federal/State partnerships with U.S. EPA.

VIRGINIA

SITES

NPL Sites		State Sites	
Final:	24	Known and Suspected:	2015
Proposed:	0	Identified as Needing Attention:	363
Deleted:	2	On Inventory or Priority List: .	

STATUTORY AUTHORITIES

The *Waste Management Act*, Va. Code §§10.1-1400 through -1457 (1986, as amended 1987, 1988, 1990, 1993, 1994, and 1995), provides for 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. The 1995 amendments created a voluntary remediation program. A State priority list is currently under development.

The *Virginia Environmental Emergency Response Fund Act*, Va. Code §§10.1-2500 through -2502 (1992) establishes the State fund.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Quality, Waste Division, Office of Federal Facilities and Superfund Programs, has two branches dealing with site cleanup: the Federal Facilities Restoration Program with 12 full time employees and the Superfund Remedial Program with five full time employees.

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

CLEANUP ACTIVITIES

Currently, remedial actions are underway at ten NPL sites and 19 non-NPL sites. Ten remedial actions were completed during FY95 at NPL sites and none were completed at non-NPL sites. However, since the start of the cleanup program, 20 remedial actions have been completed at NPL sites and 15 at non-NPL sites. Removals are currently underway at 17 NPL sites and 11 non-NPL sites. In FY95, no removals were completed at NPL sites, while four removals were completed at non-NPL sites. Since the start of the program, removals have been completed at approximately 44 NPL sites and 55 non-NPL sites.

In general, non-NPL sites tend to be Federal facilities run by the Department of Defense. As responsible parties, the Federal agencies pay for the remediation and removal activities. A total of six NPL sites are Federal facilities, while 26 non-NPL sites are Federal facilities.

CLEANUP FUNDING

The Virginia Environmental Emergency Response Fund was established in 1992 for emergency response actions. It had a balance of $2.5M as of 6/30/95. Additions of $414K were made to the fund during FY95, mostly from penalties. A total of $73K was paid out during FY95 to non-NPL sites. Virginia has a Capital Project Account for Environmental Remediation that is used for the 10% match on cleanups under Superfund.

Responsible parties have spent approximately $70K on State-supervised non-NPL cleanups in the State in FY95. This figure comes from Department of Defense numbers, which represent the majority of non-NPL cleanups.

CLEANUP POLICIES AND CRITERIA

The State uses water quality standards, MCLs/MCLGs, 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. Risk levels used for risk assessments are typically between 10^{-4} and 10^{-6}.

PUBLIC PARTICIPATION

Virginia uses the Federal Superfund regulations for notice and comment concerning the analysis of NPL site cleanup alternatives. No public participation is specified in the new voluntary remediation program.

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 consent orders, take injunctive action and impose civil penalties and punitive damages. Civil penalties are up to $25K per day per violation of an order. Punitive damages available from individuals are $25K for knowingly making false statements, and $250K for knowingly violating the State's statute or regulations and placing another person in imminent danger of death or serious bodily injury. Corporate defendants are subject to up to $1M per offense or an amount equal to three 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Since July 1995, the State has had a program for voluntary cleanups of contaminated sites (Code of Virginia, §§10.1-1429 to 1429.3). Eligibility is limited to sites where remediation is not mandated pursuant to CERCLA, RCRA (subtitles C, D, I), Virginia Hazardous Waste Management Act, and Virginia Water Control Law. Incentives for participation in the program include certification of satisfactory completion of remediation, which constitutes immunity to a State enforcement action. The State participation is funded in part by responsible parties through a fee based on 1% of remediation cost or $5K, whichever is less. Initially, voluntary cleanup costs seem to be up to $500K.

Virginia does not have an explicit brownfields program, but the Voluntary Remediation Program will assist the two EPA brownfields pilot projects in Virginia if contamination is found.

FEDERAL/STATE PARTNERSHIPS

For FY95, Virginia has a CPCA, a SMOA, 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 §§22-19-1 through 22-19-6 (1984, as amended 1994), establishes a cleanup fund for emergency response and CERCLA match, and provides for cleanup authorities.

The *Hazardous Waste Management Act*, W.Va. Code §§22-18-1 through 22-18-25 (1981, as amended 1985, 1989, 1991, and 1994), contains enforcement authorities and property transfer disclosure requirements.

The *Groundwater Protection Act*, W.Va. §§22-12-1 through 22-12-14 (1991, as amended 1993 and 1994) 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 members. 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 is currently underway at four 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

Current fund information was not available. The Hazardous Waste Emergency Response Fund had a balance of $2.20M at the end of fiscal year (6/30/93).

The main source of Fund monies is hazardous waste generator fees. Generator assessments cease if the unobligated balance exceeds $1.5M at the end of the fiscal year. Fees are again assessed when the balance reaches $1M.

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 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, the 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. Under HWERF, 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 HWMA.

Natural Resource Damages

No policy or program exists at present.

Property Transfer

The 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

No information was available on voluntary cleanup or brownfield programs.

FEDERAL/STATE PARTNERSHIPS

For FY95, West Virginia has a CPCA and SSCAs with the U.S. EPA.

REGION IV

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

ALABAMA

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	650
Proposed:	1	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, Alabama Department of Environmental Management (ADEM) has 20 FTE staff working on cleanup activities (three in management; five in the Engineering Section; eight in Site Assessment; and four in Field Operations). Legal support is provided by 0.1 FTE attorney in the ADEM 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 seven remedial actions underway at non-NPL sites, and has completed nine since the start of the program including one during the last fiscal year. It has 15 removals underway, and has completed 80 since the start of the program, including 17 during the last fiscal year.

Remedial actions are underway at 11 NPL sites. One remedial action and six removals have been completed at NPL sites since the start of the program, including five removals during the last fiscal year.

CLEANUP FUNDING

The Hazardous Substance Cleanup Fund had a balance of $478,167 at the end of the fiscal year (9/30/95). Additions to the Fund during the year were $441,499. The Fund receives monies from waste disposal fees, cost recoveries, and appropriations. The Fund paid out $324,048 during the year 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 operations and maintenance.

CLEANUP POLICIES AND CRITERIA

Cleanup standards include water quality criteria, MCLs and MCLGs, background levels, risk assessments, EPA Guidelines, and groundwater standards. 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 of an administrative order unless there is an imminent threat to human health.

ENFORCEMENT

Liability

Liability is retroactive and proportional. Civil penalties are authorized up to $25K per day per violation of an order. No punitive damages are available.

Natural Resource Damages

The State lacks authority independent of federal law to recover natural resource damages. Four claims are pending at NPL sites.

Property Transfer

No law.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has an informal voluntary cleanup program; guidelines are under development. Inactive sites with no current enforcement actions are eligible to participate. Incentives include lower oversight costs and speed; the State collects reimbursement for its oversight costs.

The State has an informal brownfields program in connection with its voluntary program. Guidelines are under development.

FEDERAL/STATE PARTNERSHIPS

For FY95, Alabama has a CPCA, a SMOA, and SSCAs with U.S. EPA.

FLORIDA

SITES

NPL Sites		State Sites	
Final:	54	Known and Suspected:	1023
Proposed:	4	Identified as Needing Attention:	656
Delisted:	6	On Inventory or Priority List:	*No list*

STATUTORY AUTHORITIES

The *Pollutant Discharge Prevention and Removal Act*, Fla. Stat. §§376.30 through 376.319 (1983, as amended 1984, 1986, 1988, 1993, and 1995), establishes the Water Quality Assurance Trust Fund (WQATF) 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 has five sections (62 staff members) that administer the program: (1) Hazardous Waste Cleanup (22 staff members); (2) Preliminary Assessment (11 staff members); (3) Site Investigation (16 staff members); (4) Registration (two staff members), and Technical Support (five staff members) and Enforcement (with six District staff members). Legal support is provided by 2 attorneys in DER's Office of General Counsel. The Emergency Response Program has 12 staff, five in Tallahassee and seven in regional offices. State trust funds (85%) and Federal grants (15%) provide money for staff and administration.

CLEANUP ACTIVITIES

The State has completed 29 remedial actions and 15 removals at non-NPL sites since the start of its program, including five remedial actions during the last fiscal year. Twenty-three remedial actions are underway at non-NPL sites.

Twenty-eight remedial actions have been completed at NPL sites, and are underway. Thirty removals occurred at NPL sites.

CLEANUP FUNDING

The Water Quality Assurance Trust Fund was originally 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. The fund balance is approximately $7M. The 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, operations and maintenance, grants to local

government, program administration, natural resource restoration, and State CERCLA match. $1.7M was expended from this fund during the last fiscal year for non-NPL related activities. During the same period $500K was obligated for NPL site activities and $3,245,400 for non-NPL activities.

The Hazardous Waste Management Trust Fund serves as a holding account for Federal monies – primarily EPA grants and DOD cleanup funds. This Fund also serves as the collection point for the drycleaner tax collected for the cleanup of drycleaning facilities; these monies are transferred to the WQATF when it is time to make expenditures. The State noted that approximately $1.5M is annually expended from the Hazardous Waste Management Trust Fund, but provided no information on additions, expenditures, or obligations. The fund receives money from cost recoveries, interest, penalties, and transfers and can be used for many of the same activities as the WQATF.

CLEANUP POLICIES AND CRITERIA

Cleanup criteria are site-specific based on risk assessments and any applicable standards. Water quality criteria, MCLs/MCLGs, background levels, risk assessment, and EPA guidelines are used to establish cleanup levels. Risk levels for risk assessment are set at 10^{-6} for carcinogens and a Hazard Index (HI) of 1 for non-carcinogens.

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. Additionally, Chapter 119 of the Florida Statutes, requires that all State records, including site cleanup documentation, shall at all times be open for personal inspection by any person.

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 per 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

State law authorizes collection of natural resource damages for coastal oil spills and for damage to coral reefs. In general, these authorities have not been applied to hazardous substances cleanups.

Property Transfer

The State has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has no programs. Contaminated sites are cleaned up, in most cases, by responsible parties under State enforcement authority. Sites without viable responsible parties are handled by the State-funded cleanup program or by EPA. The State does provide technical assistance to help expedite cleanups at potential brownfields sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Florida has SSCAs with the U.S. EPA.

GEORGIA

SITES

NPL Sites		State Sites	
Final:	13	Known and Suspected:	904
Proposed:	1	Identified as Needing Attention:	82
Deleted:	1	On Inventory or Priority List:	351

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. The *Hazardous Waste Management Act*, O.C.G.A. 12-8-60, also provides some enforcement and remedial action authority.

PROGRAM ORGANIZATION AND FUNDING

The Georgia Department of Natural Resources, Environmental Protection Division, Hazardous Sites Response Program had 18 FTEs at the end of FY 1995, funded entirely by the Hazardous Waste Trust Fund. Since then, 13 more positions have been authorized for the Program, and they are being filled currently. The State Law Department provides legal support with one FTE attorney.

CLEANUP ACTIVITIES

Approximately 75 remedial actions and 33 removal actions are currently underway at non-NPL sites. Eight removals were completed last fiscal year at non-NPL sites. EPA remedial actions are underway at eight NPL sites.

CLEANUP FUNDING

The Hazardous Waste Trust Fund had a balance of $13,029,281 at the end of the fiscal year (6/30/95). Collections for FY 1995 were $11,535,443. $2,538,000 were expended during the year -- all on non-NPL activities and program support, with the exception of operations and maintenance at one NPL site. $4.9M was obligated for non-NPL activities. 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, operations and maintenance, CERCLA match, pollution prevention, and program administration.

CLEANUP POLICIES AND CRITERIA

The agency published its inventory of sites beginning in 1994. The HSRA required the Board of Natural Resources to adopt regulations establishing cleanup standards. These standards have been promulgated. Risk levels used are 10^{-5} for cancer risks, and 10^{-4} for Class C carcinogens.

PUBLIC PARTICIPATION

Pursuant to statute, the agency has adopted regulations providing for public participation in developing the site inventory and the cleanup process.

ENFORCEMENT

Liability

The statute provides for retroactive, strict, joint and several liability, punitive damages at least equal to the State's costs and not more than three times those costs, penalties up to $25K per 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 NRD.

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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State does not have either a voluntary or brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Georgia has a CPCA and SSCAs with the U.S. EPA.

KENTUCKY

SITES

NPL Sites		State Sites	
Final:	20	Known and Suspected:	1000
Proposed:	0	Identified as Needing Attention:	600
Delisted:	0	On Inventory or Priority List:	15

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 release notification, reportable quantities, enforcement authorities and provides for an inventory and priority list, contingency plan for emergency response cleanup and lien provisions.

PROGRAM ORGANIZATION AND FUNDING

The Natural Resources and Environmental Protection Cabinet, Division of Waste Management, Superfund Branch has 28 full-time staff for federal and State cleanup sites. The Office of Legal Services provides legal support. Half of the funding for Kentucky's program comes from Federal grants; the other half is funded through the State's general fund.

CLEANUP ACTIVITIES

Since the start of the State's program, approximately 250 non-NPL sites have been fully remediated. Thirty-nine remedial actions at non-NPL sites were completed during the last fiscal year. Remediation is currently underway at approximately 100 non-NPL sites. More than 75 removals at non-NPL sites have been conducted since the start of the State's program. Removals were completed at approximately 20 non-NPL sites during FY95, and removals are currently underway at five non-NPL sites. Remedial actions have been completed at six NPL sites, and nine removals have been conducted at NPL sites since the start of the program.

CLEANUP FUNDING

The Hazardous Waste Management Fund had a balance of $1.77M at the end of the fiscal year. There is a $6M cap on the fund. A total of $2.78M was added to the Fund during the year, and $1.6M was paid out ($1.5M for work at non-NPL sites). A total of $2.4M was obligated during the year ($2.04M for work at non-NPL sites).

Assessments on hazardous waste generators are a significant source of funding, while cost recoveries, interest, and penalties are additional sources of funding. The Fund may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, operations and maintenance, program administration and natural resource restoration.

CLEANUP POLICIES AND CRITERIA

The State has established cleanup standards by regulation. Responsible parties are permitted to select either a risk-based standard or background levels as the basis for cleanup. The risk based standards are based upon a target risk level of 10^{-6} for carcinogens and a Hazard Index of 1 for non-carcinogens.

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. Regulations provide for public notice and comment.

ENFORCEMENT

Liability

Kentucky has retroactive, strict, joint and several liability standards. The State has civil penalty authority for up to $25K per day.

Natural Resource Damages

Kentucky does not have a natural resource damages program.

Property Transfer

Kentucky requires placement of deed notices and/or deed restrictions in certain circumstances at sites where there has been a release of a hazardous substance, pollutant or contaminant. The State also maintains a database of sites where there has been a release.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Kentucky has no formal voluntary cleanup program but voluntary cleanups are permissible under its regular cleanup program.

Kentucky is working on a brownfields program. The State is participating in a City of Louisville initiative with an empowerment zone, where one site has been identified and cleanup and redevelopment are underway.

FEDERAL/STATE PARTNERSHIPS

For FY95, Kentucky has a CPCA and SSCAs with the U.S. EPA.

MISSISSIPPI

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	770
Proposed:	2	Identified as Needing Attention:	156
Delisted:	1	On Inventory or Priority List:	133

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.

The *Property Transfer Act* (1993), Miss. Code Ann. § 89-1-501 to -503, 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 create 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 11 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 125 remedial actions underway. Five remedial actions were completed in the last fiscal year; and over 30 since the beginning of the program. Eight removals are underway at non-NPL sites; 25 were completed in the last fiscal year; and over 50 since the beginning of the program.

At NPL sites, there are two remedial actions underway, and one 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 $1.3M (6/30/95). It received $669K during the fiscal year, and paid out $2.5M, all for work on non-NPL sites. The Fund is authorized to receive money from civil penalties from the pollution regulatory programs and cost recoveries. The Fund may be used for site investigation, studies and design, removals, and emergency response. Mississippi appropriates 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. It uses MCLs for groundwater, TSCA levels for PCB cleanups, and the least restrictive of the above cleanup standards for all other contaminants.

PUBLIC PARTICIPATION

Policies require a public comment period, direct mailings, and possibly public meetings during the remediation process. Statutes and regulations do not address these requirements. Local governments and the governor are notified when an emergency order is issued.

ENFORCEMENT

Liability

Mississippi has restroactive, strict, 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 per violation plus the cost of removal and/or remediation and the cost of restocking and/or replenishing killed fish. There are no punitive damages.

Natural Resource Damages

Since 1972, State law has allowed DEQ to recover cost of restocking and/or replenishing killed fish and game. No claims are pending.

Property Transfer

§89-1-501 - 523 was passed in 1993, requiring disclosure of the presence of hazardous substances before transfer.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Mississippi has no formal voluntary program or brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Mississippi has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

NORTH CAROLINA

SITES

NPL Sites		State Sites	
Final:	23	Known and Suspected:	1029
Proposed:	0	Identified as Needing Attention:	801
Delisted:	1	On Inventory or Priority List:	183

STATUTORY AUTHORITIES

The *Inactive Hazardous Sites Response Act of 1987*, N.C. Gen. Stat. §§130A-310 *et seq.* (1987, as amended 1989, 1991, 1994, 1995) authorizes the Inactive Hazardous Sites Cleanup Fund, provides authority to order RPs to conduct assessments and cleanup and to recover costs; it establishes a priority list and requirements for filing notices with registers of deeds. Recent amendments affect the State's existing voluntary cleanup program. §130A-310.9 & .12.

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, and provides enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Solid Waste Management Division of the Department of Environment, Health, and Natural Resources has 28.75 FTE staff. Legal support is provided by one attorney and 0.5 paralegal from the North Carolina Department of Justice. Funding for the Section comes 70% from EPA, 21% from the State's general fund, and 9% from cleanup agreements with the Department of Defense.

CLEANUP ACTIVITIES

Remedial actions are underway at 11 non-NPL sites. Remedial actions have been completed at 14 non-NPL sites since the start of the program, including three during the last fiscal year. Approximately ten removals were completed at non-NPL sites during the last fiscal year, and approximately 100 have been completed since the start of the program.

Remedial actions are underway at ten NPL sites. Remedial actions have been completed at one NPL site. Approximately four removals are currently underway at NPL sites.

Of the 801 sites evaluated and determined to need attention, 674 are under the jurisdiction of the State's superfund section; the remainder are either NPL sites or fall under another federal or State program.

CLEANUP FUNDING

The Inactive Hazardous Sites Cleanup Fund (IHSCF) had a balance of $2.5M at the end of the fiscal year. It received $400K and no funds were paid out or obligated from it during FY95. The IHSCF originally received most of its money from appropriations, but no appropriations have been made to the fund since FY88-89. Penalties are the most significant source of funding, as the IHSCF receives RCRA penalty money when the Emergency Response Fund exceeds its $500K cap. Cost recoveries and interest 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 on deeds 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. It paid out $53,576 during the last fiscal year. The Emergency Response Fund is administered by the Hazardous Waste Section of the Solid Waste Management Division.

The Cost Share Trust Fund, which is used only for CERCLA match at NPL sites, had a balance of $4.8M at the end of the fiscal year. It gets its funding from appropriations. The Fund received $800K during the year and $200K was paid out. The remainder of the fund, $4.5M, is obligated for use on NPL sites.

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 requires consistency with the NCP. It 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, including protection of groundwater from soil contaminant residuals.

PUBLIC PARTICIPATION

State funded enforcement cleanups require: public notice of the remedial action plan, three weeks notice in a newspaper, a 45 day comment period, a public meeting at the Secretary's discretion, and notice to those requesting to be placed on a mailing list. Copies must be 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 spending State funds under the Inactive Hazardous Sites Response Act. The State has strict, joint and several, and retroactive liability The State has authority to issue orders for cleanup, to order monitoring and assessment, and to seek injunctions to conduct assessments and

correct imminent hazards. The State cannot impose punitive damages. The Inactive Hazardous Sites Response Act has no provision for civil penalties. However, civil penalties of up to $25K per day for a first-time hazardous waste violation and $5K per day for a solid waste violation are available.

Natural Resource Damages

North Carolina has no natural resource 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.

In 1995, the legislature enacted a residential property disclosure act, which requires a seller of residential property to disclose the presence of hazardous substances.

VOLUNTARY AND BROWNFIELDS PROGRAMS

In 1987, the legislature enacted voluntary cleanup provisions. These cap remedial action costs for volunteers at $3M. Any PRP may participate, and there is no requirement to pay for State oversight or administrative costs. Under recent statutory amendments in 1994 and 1995, the voluntary cleanup program will be privatized, so that certification of cleanups will be a private transaction.

The State currently does not have any formal "brownfields initiative" that would parallel the EPA program, but is receptive to receiving specific proposals for a site or area.

FEDERAL/STATE PARTNERSHIPS

For FY95, North Carolina has a CPCA and SSCAs with the U.S. EPA.

SOUTH CAROLINA

SITES

NPL Sites		State Sites	
Final:	24	Known and Suspected:	550
Proposed:	0	Identified as Needing Attention:	120
Delisted:	1	On Inventory or Priority List:	120

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, authorizes 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

The Department of Health and Environmental Control, Environmental Quality Control, Bureau of Solid and Hazardous Waste Management employs 30 FTE staff. One attorney within the Department's Legal Office provides legal support. Federal grants account for 73% of staff funding, 17% comes from the cleanup fund, and 10% comes from the State general funds.

CLEANUP ACTIVITIES

At non-NPL sites, four remedial actions are underway and two have been completed since the start of the program. One removal is underway at non-NPL sites, and approximately 22 have been completed since the start of the program.

At NPL sites, 14 remedial actions are underway. Two remedial actions have been completed since the start of the program. Nine removals have been completed at NPL sites since the start of the program.

CLEANUP FUNDING

The Hazardous Waste Contingency Fund is an umbrella for two 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 is $18,635,064 (6/30/95). Additions to the fund during the last fiscal year were $2,140,913. Expenditures were $804,045; $61,435 on NPL sites and $742,610 on non-NPL sites. Approximately $700K were encumbered during the fiscal year, all for work on non-NPL sites. These expenditures and encumbrances are at much lower levels than in previous years. The Fund may be used for site investigation, emergency response, removals, studies and design, remedial actions,

operations and maintenance, CERCLA match, and administration. The State must exhaust available Federal and RP funds before using the Fund on particular sites.

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 assessment may be used. Risk levels of 10^{-4} and 10^{-6} are applied for risk assessment; a cleanup to 10^{-6} means that further action is not required.

PUBLIC PARTICIPATION

The State has no formal requirements, but provides informal opportunities for notice, comment, and participation on an ad hoc basis.

ENFORCEMENT

Liability

South Carolina employs strict, joint and several, and retroactive liability. The law explicitly adopts CERCLA §107 and implicitly adopts CERCLA *in toto*. South Carolina can levy civil penalties of $25K per day for violations, and treble damages for failure to clean up a site as ordered. However, stipulated penalties of $1K per day for violations of cleanup agreements have been eliminated.

Natural Resource Damages

Natural resouce damages may be assessed under the Pollution Control Act, but this authority has not been used for hazardous substance sites. Rather, the Department of Natural Resources has acted as trustee for natural resource damages assessable under CERCLA or the Oil Pollution Act. One oil spill claim has been recovered in the amount of $3M, with $800K going to the State.

Property Transfer

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

VOLUNTARY AND BROWNFIELDS PROGRAMS

Voluntary cleanups are pursued under the regular State program; any PRP or potential purchaser may participate. The voluntary program was established in 1989 by guidance document. State support is funded from the Contingency Fund and from appropriations; PRPs are not charged for State services.

A brownfields policy is currently under development as part of the voluntary cleanup program. Participation will be by non-PRPs. One site is currently under negotiation in connection with this policy.

FEDERAL/STATE PARTNERSHIPS

For FY95, South Carolina has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

TENNESSEE

SITES

NPL Sites		State Sites	
Final:	17	Known and Suspected:	1270
Proposed:	1	Identified as Needing Attention:	198
Delisted:	0	On Inventory or Priority List:	156

STATUTORY AUTHORITIES

The *Hazardous Waste Management Act of 1983* (as amended 1986, 1988, 1989, 1990, 1991, 1994, and 1995), Part II, Tenn. Code Ann. §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 on deeds for any site listed. Recent amendments allow the State to spend fund monies even if a site is not on the list provided that an order is in place, and to fund orphan shares of sites in the recently created voluntary cleanup program. Both the voluntary cleanup oversight and assistance program and a dry cleaner environmental response program were added by amendment.

PROGRAM ORGANIZATION AND FUNDING

The Tennessee Department of Environment and Conservation (DEC), Division of Superfund has 64 FTE staff. Legal support is provided by 1.5 attorneys in DEC and 0.5 attorney in the AG's office. Staff and administrative costs are funded from the Hazardous Remedial Action Fund (59%), Federal grants (26%), and the State's general fund (15%).

CLEANUP ACTIVITIES

Remedial or removal actions have been completed at 341 non-NPL sites since the start of the State's program (including 75 emergency responses). Although the State does not maintain historic data differentiating remedial actions and removals, 79 of these sites were delisted from the State list (suggesting these should be classified as remedial actions).

Currently, there are seven remedial actions and six removal actions underway at non-NPL sites. During the last fiscal year, four remedial actions and 13 removal actions were completed at non-NPL sites.

Two remedial actions are underway at NPL sites. Eleven remedial actions and 11 removals have been completed at NPL sites since the start of the program.

CLEANUP FUNDING

The Hazardous Waste Remedial Action Fund had a balance of $8,036,052 at the end of the fiscal year (6/30/95). $5,426,626 was added to the fund during the year. Expenditures were $3,154,805, including program administration. Direct expenditures for NPL sites

totaled $59K. Expenditures at non-NPL sites totaled $1,423,000. Significant sources of fund monies include appropriations, cost recoveries, and fees on transporters and generators. 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, CERCLA match, and grants to local governments.

CLEANUP POLICIES AND CRITERIA

The State uses water quality criteria, MCLs, background levels, risk assessment, and EPA guidelines in setting cleanup levels. If no standard is available, a risk assessment is conducted to set site-specific levels. Risk levels of 10^{-4} to 10^{-6} are applied on a case-by-case basis depending on the site, the contaminated media, the contaminant, and the population and/or environment at risk.

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 retroactive, proportional liability and requires each liable party to pay an equitable portion, taking various factors into consideration. The Department of Environment and Conservation is responsible for apportioning liability. The Commissioner of DEC is authorized to issue orders for site information, access, and remedial response, to assess civil penalties up to $10K per day per violation or failure to pay fees or file reports, and to 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 to take action to assess damages with the assistance of other State departments. No damages have been recovered to date, and there are no claims pending.

Property Transfer

Tenn. Code Ann. §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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

In 1994, the legislature established a voluntary cleanup program open to all sites that fall within the cleanup program. Incentives for participation include: the avoidance of a public hearing and placement on the State's list; no notice required to be recorded in the deed records; no liens; release of liability pursuant to performance under consent order; and payment of orphan shares. State oversight is funded by PRP payment of actual costs and a $5K participation fee.

There is no formal brownfields program, but the State is working with business and local governments to bring brownfields sites into the voluntary cleanup program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Tennessee has a CPCA and SSCAs with the U.S. EPA.

REGION V

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

ILLINOIS

SITES

NPL Sites		State Sites	
Final:	38	Known and Suspected:	5000
Proposed:	1	Identified as Needing Attention:	950
Deleted:	2	On Inventory or Priority List:	120

STATUTORY AUTHORITIES

The *Environmental Protection Act* (1970, amended every year from 1983-1993, and 1995), established the Hazardous Waste Fund and provides for enforcement, cost recovery, and punitive damages. The 1995 amendments (effective 7/1/96) provide for proportional liability and move $2M per year from a solid waste cleanup fund to the Hazardous Waste Fund.

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 (IEPA), has 105 FTE staff. Legal support is provided by 7 FTE attorneys in the IEPA Division of Legal Counsel, with additional assistance available from the Attorney General's Office. Staff and administration funding is 34% supported by Federal grants, with 66% from the State's cleanup fund.

CLEANUP ACTIVITIES

Remedial actions are underway at three non-NPL sites; 40 have been completed since the start of the program, including 11 in FY95. Three removals are underway at non-NPL sites; 35 have been completed since the start of the program, including three in FY95. Of the non-NPL sites, a substantial number of the remedial actions and removals have been conducted under Illinois' voluntary cleanup program.

At NPL sites five remedial actions are underway; four remedial actions have been completed in FY95; and ten remedial actions have been completed since the start of the program. Four removal actions were completed at NPL sites in FY95 and eight have been completed since the beginning of the program.

CLEANUP FUNDING

The Illinois Hazardous Waste Fund had a balance of $6.4M at the end of the fiscal year (6/30/95). It received income of $3.86M during FY95, primarily from the fees collected for transport and disposal of hazardous wastes, but also from penalties and cost recoveries. Expenditures were $2.34M, $1.92M of which was for non-NPL sites; and $2.13M was

obligated. Funds may be used for site investigation, studies and design, emergency response, removals, remedial actions, CERCLA match, O&M, program administration, and natural resource assessment (but not restoration).

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs and MCLGs, background levels, soil standards, and Illinois groundwater quality standards are applied to determine cleanup levels. Cleanup levels are based on a risk-based tiered approach for the protection of groundwater, and the protection of human health from other exposures. Risks between 10^{-4} - 10^{-6} are evaluated on a site specific basis.

The 1995 amendments establish a risk-based system that considers the present and future land use of the site. Three Tiers of risk-based remediation objectives will be established by regulation.

PUBLIC PARTICIPATION

By policy, community relations coordinators are assigned to sites; coordinators emphasize direct contact in small groups, or one-to-one communication.

At NPL sites, NCP rules apply and the required public meeting is conducted as a formal public hearing with a court reporter and transcript.

ENFORCEMENT

Liability

Liability is strict, joint and several, and retroactive, but after July 1, 1996 any person not subject to federal cleanup requirements under RCRA or CERCLA or State underground storage tank law may elect proportionate liability. 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

The State lacks authority to pursue natural resource damages claims independent of CERCLA.

Property Transfer

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

VOLUNTARY AND BROWNFIELDS PROGRAMS

The voluntary program was established by statute in 1986-87 (22.2(m) of IEPA). Non-NPL, non-RCRA, non-enforcement sites are eligible to participate in the program. IEPA is responsive to participant time frames or deadlines, which is an incentive for participants.

The State's participation is funded by private fees for services rendered, which includes actual salaries plus overhead. On average, the voluntary cleanup costs range from $500-$10K.

The State brownfields program was amended by Title XVII of the 1995 amendments and by policy. All sites except those on the NPL, covered by RCRA, or under federal or court order to cleanup, are eligible for inclusion in the program. Four hundred to 600 sites have been identified or included in the program, and cleanup is underway at 400 sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Illinois has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

INDIANA

SITES

NPL Sites		State Sites	
Final:	36	Known and Suspected:	2500
Proposed:	1	Identified as Needing Attention:	200
Deleted:	5	On Inventory or Priority List:	63

STATUTORY AUTHORITIES

The *Hazardous Substance Response Trust Fund Act*, Ind. Code §13-7-8.7 (1986, as amended 1987, 1988, 1989, and 1991), establishes a cleanup fund and authorizes enforcement actions.

The *Environmental Management Special Fund*, Ind. Code §13-7-13-2 (1972), was set up to receive money from penalties and various fees.

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

The Voluntary Remediation Program was established by Ind. Code §13-7-8.9 (1993).

PROGRAM ORGANIZATION AND FUNDING

The Office of Environmental Response, Indiana Department of Environmental Management (IDEM) has 53 FTE staff members working on NPL and non-NPL sites, federal facilities, voluntary cleanups and emergency responses. The State Cleanup Section has five staff members and the Voluntary Section has eight FTEs. Legal support is provided by four attorneys in the IDEM Office of Legal Counsel; the Attorney General's Office provides two FTEs. Staffing and administration are funded 69% from the State general fund, 6% from cleanup funds, and 25% from Federal grants.

CLEANUP ACTIVITIES

Seventeen remedial actions are underway at non-NPL State sites. One non-NPL remedial action was completed in FY95 and three have been completed since the start of the program. Eight removals are underway at non-NPL sites, 12 non-NPL removals were completed in FY95, and 40 non-NPL removals have been completed since the start of the program.

Sixteen remedial actions are underway at NPL sites. Five remedial actions were completed at NPL sites during FY95, and 11 have been completed since the start of the program. Two removals are underway at NPL sites, no removals were completed at NPL sites during FY95, and 23 have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substances Response Trust Fund (HSRTF) had a balance of $27.55M at the close of the fiscal year (6/30/95). The HSRTF is funded by taxes, penalties, cost recovery, punitive damages, interest, and appropriations. Taxes are the most significant source of funds. The HSRTF shows additions of $87.3M during FY95, but virtually all of that was roll-over investments and not included in the year-end balance. Expenditures were $1.68M ($0.96M of which was for non-NPL sites) and $0.81M was obligated ($0.72M for non-NPL sites). The HSRTF may be used for site investigation, emergency response, removals, studies and design, remedial actions, O&M, grants to local government, program administration and CERCLA match.

IDEM also has the Environmental Management Special Fund, which had a balance of $22.96M at the end of FY95. The sources for this Fund are penalties, fines, fees and appropriations, with appropriations being the significant source. Additions to the Fund during FY95 amounted to $6.56M. Non-NPL sites received $253,734 in expenditures from this Fund in FY95. The Special Fund may be used for emergency response, replacement of water supplies, and grants to local government, as well as other non-cleanup environmental projects.

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs and MCLGs, background levels 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^{-6}. The State also has a Voluntary Cleanup Guidance which is risk-based and recognizes future land use.

PUBLIC PARTICIPATION

On State-funded cleanups, the State's policy is to follow CERCLA guidance on public notice, comment, hearings and document availability. The voluntary remediation program requires public notice and a public comment period before the Commissioner may approve a proposed work plan. The Voluntary Remediation Program statute also requires hearings and document availability.

ENFORCEMENT

Liability

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

Natural Resource Damages

The State's natural resource damages program commenced in 1988, using CERCLA authority and has recovered $3.8M in 12 settlements. There are 6 claims currently pending, seeking $7M - $15M. IDEM cooperates with the Department of Natural Resources to perform pre-assessment screens and damage investigations. Three natural resource restoration actions are underway at a cost of about $3M.

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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The Voluntary Remediation Program created by statute in 1993 is a separate cleanup program. Any site not under a pending enforcement action or in an emergency condition is eligible. Incentives to participate include certificates of completion and covenants not to sue. The State's participation is funded by fees and cost recovery, with a $1K initial fee plus the State's costs if they exceed the flat fee.

The State recently established a brownfields program by policy. Approximately 70 sites are covered.

FEDERAL/STATE PARTNERSHIPS

For FY95, Indiana has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

MICHIGAN

SITES

NPL Sites		State Sites	
Final:	74	Known and Suspected:	N/A
Proposed:	4	Identified as Needing Attention:	2,764
Deleted:	6	On Inventory or Priority List:	2,764

STATUTORY AUTHORITIES

The *Michigan Natural Resources and Environmental Protection Act*, PA 451 of 1994, Parts 193 (Bond Authorization), 195 (Bond Implementation), and 201 (Environmental Remediation), authorizes the Department of Environmental Quality to clean up contaminated sites, and provides for a cleanup fund, enforcement, liability, cost recovery, public participation, a priority list, voluntary cleanups and citizen suits.

PROGRAM ORGANIZATION AND FUNDING

The Environmental Response Division in the Department of Environmental Quality has responsibility for cleanup activities. It employs 298 staff members. The Attorney General's Office provides legal support with 8 FTE attorneys. Funding for staff and administration comes 75% from the State's cleanup fund, 10% from the State's general fund, and 15% from Federal grants.

CLEANUP ACTIVITIES

The State has 69 remedial actions underway at non-NPL sites. Since the start of the program it has completed 155 remedial actions at non-NPL sites, with 28 completed during FY95. Removals are underway at over 181 non-NPL sites, with 4873 completed since the start of the program including 1284 in FY95.

Thirty six remedial actions are underway at NPL sites; 19 remedial actions have been completed since the start of the program; and eight were completed during FY95. Eight removals are currently underway at NPL sites. Twenty-eight removals have been completed since the start of the program, but none were completed at NPL sites last year.

CLEANUP FUNDING

The Environmental Response Fund had a balance of $19M at the end of the fiscal year (9/30/95). The DEQ obligated $0.5M for non-NPL cleanups from these funds. ERF funds may be used for site investigations, emergency response, removals, studies and design, remedial actions, natural resource restoration, O&M, CERCLA match, and program administration. It is funded primarily from appropriations and cost recoveries, with minor contributions from interest and penalties. As of October 1, 1995, $45M of the initial $425M General Obligation Bond had not been appropriated. The appropriated Environmental

Protection Bond Fund had a balance of $165M at the end of the fiscal year (9/30/95), with additions of $62M and obligations of $50M during the year, all for non-NPL cleanups. This Fund is funded entirely by the sale of bonds. The Bond Fund can be used for site investigation, emergency response, removals, studies and design, remedial actions, CERCLA match, O&M, program administration, and grants to local governments.

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 new cleanup program uses land-use-based cleanup criteria for residential, commercial, and industrial uses, with a tiered system that starts with established numerical standards for identified contaminants or allows site-specific risk assessments to determine cleanup levels. Institutional and site-specific exposure controls may be used to achieve the public health risk goal. The State uses a risk goal of 10^{-5} for carcinogens and a Hazard Quotient of 1, assuming 100% exposure from the site, for noncarcinogens.

PUBLIC PARTICIPATION

The Michigan Natural Resources and Environmental Protection Act provides for public notice and comment, hearings and document availability during the cleanup process.

ENFORCEMENT

Liability

Prior to June 5, 1995, liability was strict, joint and several, and retroactive for owners, operators, generators and transporters. A person who becomes an owner or operator after June 5, 1995, may obtain an exemption from liability for existing contamination by performing a baseline environmental assessment. For prior owners and operators liability is based on causation; they are liable if they are responsible for an activity causing a release. Liability is joint and several, and retroactive for generators, transporters, owners and operators responsible for a release, and for new owners and operators that do not perform a baseline environmental assessment. 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; up to $10K per day for violations of law or rules; and up to $25K per 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 1987, which is authorized by Parts 201 and 31 (Water Resources Protection) of NREPA. The program has recovered $5.69M in damages from 6 cases. Currently, there are 5 natural resource claims pending under State law. All NRD claims are filed under State law, although some also

include claims under CERCLA. Six natural resource restoration actions are underway, and 1 has been completed.

Property Transfer

Part 201 of NREPA, the public use deed act, and general property tax law govern transfers of contaminated property. Liens and superliens are available. The seller is required to disclose contamination or the presence of hazardous substances to the buyer and on the deed. A buyer may obtain an exemption from liability for existing contamination by performing a baseline environmental assessment. The new owner or operator must also exercise due care with respect to existing contamination. The State also maintains a database of known or listed sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The Michigan voluntary cleanup program is an integral part of the overall cleanup program. It facilitates voluntary cleanup through clear and flexible cleanup criteria and self implementing statutory language (Act 451 part 201). Anyone is eligible to participate, and will benefit from letters of completion, removal from the list of contaminated sites, clear cleanup criteria and a self implementing statute. The State's participation generally is publicly funded unless a responsible party enters into an AOC with the State.

The State brownfields program was established by statute (Act 451 parts 193, 195 and 201) and has reuse/redevelopment as a priority. The criteria for grants include economically distressed areas and areas with potential for redevelopment. To date, over 121 sites have been included in the program, of which 21 have received site reclamation grants, 35 have received site assessment grants, 58 have covenants not to sue, and more than seven are State bond funded sites. Cleanup is underway at approximately 70 sites, and 79 have commitments for redevelopment (58 are sites with CNTS, 21 have site reclamation grants).

FEDERAL/STATE PARTNERSHIPS

For FY95, Michigan has a CPCA, a SMOA, and SSCAs with U.S. EPA.

MINNESOTA

SITES

NPL Sites		State Sites	
Final:	47	Known and Suspected:	3,000
Proposed:	0	Identified as Needing Attention:	215
Deleted:	7	On Inventory or Priority List:	181

STATUTORY AUTHORITIES

The *Minnesota Environmental Response & Liability Act* (MERLA), Minn. Stat. §§115B.01 through .24 (1983, as amended 1984, 1985, 1986, 1987, 1990, 1992, 1993, 1994, and 1995), 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 an 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. The 1994 legislation removed mixed municipal solid waste landfills from the State's superfund program if they stopped accepting waste by April 9, 1994, and set up a separate State-funded program to clean up these landfills. A separate program and fund for cleaning up dry cleaning facilities was also established in 1995 and changes were made to the Voluntary Investigation and Cleanup (VIC) Program in 1994 and 1995.

PROGRAM ORGANIZATION AND FUNDING

Minnesota Pollution Control Agency (MPCA), Groundwater and Solid Waste Division has one section dealing with State and federal Superfund sites with a total of 93 FTE staff members. The Site Response Section is primarily responsible for and handles hazardous waste sites, the Voluntary Investigation & Cleanup Program, and the Site Assessment and Listing Program. Legal support is provided by 5 attorneys in the Attorney General's Office who work full-time for the State program. Funding comes from the States' cleanup fund (75%) and from Federal grants (25%). The Hazardous Waste Division handles emergency response and the Minnesota Department of Agriculture handles agricultural chemical sites.

CLEANUP ACTIVITIES

At non-NPL sites, Minnesota has completed 114 remedial actions since the start of the program (58 of which were VIC sites), 22 in fiscal year 1995 (18 VIC), and 34 remedial actions are currently underway (six VIC). Minnesota has completed 92 removals, seven in FY95, and 151 are underway. The State also completed 103 emergency responses in FY95.

At NPL sites, 14 remedial actions are currently underway. Remedial actions have been completed at 18 sites since the start of the program, three of these in FY95. Eleven

removals are currently underway, and three were completed in FY95. Three removals have been completed since the start of the program.

CLEANUP FUNDING

The MERLA fund balance was $2,981,000 at the end of FY95. Additions to the fund totalled $5,692,000 in FY95 from cost recovery and penalties/fees, waste end taxes, and interest. The Fund paid out $6,714,000 in FY95, $6,639,427 of it for non-NPL site cleanup and administration, and $74,573 for the NPL state match. In FY95, a total of $408,002 was obligated, $372,575 of which went to 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, victim compensation, grants to local government, reimbursement to non-RPs, property acquisition if necessary to the response action, 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.

Responsible parties spent an estimated $26.3M on State-supervised cleanups in FY95 and have spent $339.6M since the program began. These figures do not include amounts spent to clean up VIC sites and are incomplete as some RPs are unwilling to disclose the amounts they spend.

CLEANUP POLICIES AND CRITERIA

Each site is evaluated using a risk-based approach which considers land use along with protection of human health, environment and natural resources. The MPCA uses ARARs. A 10^{-5} cancer risk factor, or Hazard Index of <0.2 for individual non-carcinogenic contaminants or 1.0 for multiple contaminants, is used in the absence of applicable standards. Other criteria applied include health risk limits (HRL) for drinking water contaminants, State groundwater cleanup levels, groundwater non-degradation standards, water quality criteria, MCLs/MCLGs, and EPA guidelines. The most restrictive criteria are applied at each site.

PUBLIC PARTICIPATION

The 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, joint and several, and retroactive liability. The State may collect up to $20K per day if a party fails to take 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

The State's Natural Resource Damages Program (Minn. Stat. Ch. 115B.04) is being used as leverage to attain high quality response actions that generally include restoration of natural resources. The State obtained its first settlement of a natural resource damage claim in 1994 for $91K. There was one settlement jointly with the federal government under CERCLA. The MPCA and DNR are joint trustees.

Property Transfer

Under MN Stat. Ch. 115B.17, Minnesota requires disclosure when hazardous substances are discovered and recording on the deed in certain cases.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State's Voluntary cleanup program (Minn. Stat. Ch. 115B.17, Subd. 14; Ch. 115B.175), established in 1988 by statute and guidance, with a requirement for 100% cost recovery, is a distinctive part of the State Superfund program. Any party willing and able to conduct the necessary work in a timely manner and reimburse the State for oversight costs is eligible to participate. The incentives available for participants are technical assistance (staff review and guidance documents) and liability assurances and financial assistance (administered by other State agencies). The State's participation is funded through MERLA fund appropriations and Federal cooperative agreements, and a charge of approximately $70/hour as reimbursement for services. The estimated average of costs of voluntary cleanups is between $25K-6.5M, with the State reimbursed range falling between $2K-6K. Approximately 700 sites have been identified or included in the program, and cleanup is underway at a few hundred sites.

The State brownfields program is carried out under the Voluntary Investigation and Cleanup Program (VIC).

FEDERAL/STATE PARTNERSHIP

For FY95, Minnesota has a CPCA, a SMOA, and SSCAs with U.S. EPA.

OHIO

SITES

NPL Sites		State Sites	
Final:	34	Known and Suspected:	1190
Proposed:	4	Identified as Needing Attention:	406
Deleted:	0	On Inventory or Priority List:	1190

STATUTORY AUTHORITIES

The Solid and Hazardous Waste Section of the Ohio Rev. Code §§3734.01 - .28 (1980, as amended 1988 and 1995), contains provisions for two cleanup funds, enforcement authorities and citizen suits. Ohio's Voluntary Action Program (VAP) is codified at Ohio Rev. Code Ch. 3746 and became effective September 28, 1994.

PROGRAM ORGANIZATION AND FUNDING

The Division of Emergency and Remedial Response (DERR) in the Ohio Environmental Protection Agency (OEPA) administers the cleanup program. The program employs 176 FTEs on non-NPL sites and receives its funding from State cleanup funds (85%) and Federal grants (15%). The Attorney General's Office supplies five attorneys and Ohio EPA has six attorney FTEs (three with Emergency Response, two with Voluntary Action Program, one with supervisory duties).

CLEANUP ACTIVITIES

At non-NPL sites, Ohio has completed five remedial actions since the start of the program and has 54 currently underway. The State has completed 250 removals since the start of the program, 42 in fiscal year 1995, and has 51 more underway.

At NPL sites, 34 remedial actions are underway.

CLEANUP FUNDING

Ohio has two Funds available for cleanups. Fund 505 (hazardous waste) has a balance of $13,800,866 (6/30/95). A total of $11,563 ,721 added in fiscal year 1995. Approximately $7M of this was obtained from tipping fees, $3.84M from civil penalties and $723K from cost recoveries. The Fund paid out $2,232,219 during FY95, $1,477,519 for non-NPL sites, and obligated an additional $1,277,774. Fund 505 is used for day-to-day remedial activities and State level-of-effort contracts for cleanups at 34 federal Superfund sites and approximately 130 State designated sites. The other fund is 503, which had a balance of $25,754,827 (6/30/95). Fund 503 is used for CERCLA 10% matching funds, and non-investigatory emergency response actions and for other hazardous waste management activities. The DERR spent $3,754,521 and encumbered $349,801 from Fund 503.

CLEANUP POLICIES AND CRITERIA

Ohio selects cleanup standards on a site-specific basis using risk assessments, MCLs, 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. For non-carcinogens the State uses a Hazard Index of 1. 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 clean up to risk-based levels or background. The State is developing rules for the Voluntary Action Program, including cleanup standards.

PUBLIC PARTICIPATION

Under generally applicable Ohio statutes and rules, DERR provides public notice and comment, and fact sheets. In addition, the current policy is to be consistent with the NCP, and requires a public comment period, responsiveness summary, public meetings, community relations plans, and establishment of an information reporting system.

ENFORCEMENT

Liability

Ohio enforces strict, joint and several liability. Liability is retroactive. 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 per 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 1991, the State has recovered $200K under CERCLA. There are currently two claims pending. One natural resource restoration action is underway.

Property Transfer

No law.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The Voluntary Action Program (VAP) is administered under separate statutory authority from the State-run program. Voluntary cleanup is encouraged so DERR can focus its enforcement efforts on non-voluntary high priority sites. Any site is eligible unless it is on the NPL, is subject to closure under Ohio solid and hazardous waste laws, is subject to the underground storage tank law, or is the subject of a notification that the Director will initiate an enforcement action to clean up the property. VAP sites may be overseen by certified professionals with no State oversight except for sites selected for audits. The State may provide a release from liability if the State standards are met. State participation is funded through fees from volunteers and professionals and labs seeking certification.

The State targets brownfields through the VAP.

FEDERAL/STATE PARTNERSHIPS

For FY95, Ohio has a CPCA, a SMOA, and SSCAs with U.S. EPA.

WISCONSIN

SITES

NPL Sites		State Sites	
Final:	41	Known and Suspected:	4,000
Proposed:	0	Identified as Needing Attention:	565
Deleted:	0	On Inventory or Priority List:	4,000

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 responsible party (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 Statute*, Wis. Stat. §144.76, (1978) authorizes the DNR to use money appropriated for the EF to respond to discharges of hazardous substances; it requires development of a contingency plan.

The *Contaminated Land Recycling Statute* (Act 453), Wis. Stat. §§144.765 and 144.4422 (1994), authorizes the DNR to provide innocent purchaser exemptions from liability in specific circumstances and defines cleanup processes and cost recoveries for tax delinquent, municipally owned properties.

PROGRAM ORGANIZATION AND FUNDING

Within the Department of Natural Resources, the Emergency and Remedial Response (ERR) program has 50 full-time staff that deal with Federal Superfund and State response. Legal support comes from three full-time attorneys in the DNR's Bureau of Legal Services. Seventy percent of funding for the ERR program comes from Federal grants, 10% from the State General Fund, and the remaining 20% from the State cleanup fund.

CLEANUP ACTIVITIES

Wisconsin has 120 remedial actions underway at non-NPL sites. The State has completed 750 remedial actions at non-NPL sites since the start of the program, up considerably from the reported 80-100 completed actions in FY93. The increased rate of completions can be attributed to the inclusion of sites with responsible party leads (approximately 90% of newly included sites) and cleanups paid for by the State funded environmental repair program (10% of sites). Thirty remedial actions were completed during fiscal year 1995. Ten removals are currently underway at non-NPL sites. Four hundred-fifty removals have been completed since the start of the program, 12 in FY95.

Remedial actions are underway at six NPL sites. Eleven remedial actions have been completed at NPL sites since the start of the program, and six were completed in FY95. Removals are underway at four NPL sites. Since the start of the program, 25 removals have been completed, with three completed during FY95.

CLEANUP FUNDING

The Environmental Fund (EF) had a balance of $3,472,000 at the end of FY95. The EF added $2,449,500 during FY95 from appropriations, bonds, fees, cost recoveries, interest, penalties, private funds, transfers, 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 $5,425,000 in FY95. Non-NPL sites received $4.35M and NPL sites $1,075,000 of the monies paid out. Additionally, $9,925,000 was obligated in FY95, $8.85M for non-NPL sites and $1,075,000 for NPL sites.

In addition, approximately $11M in bond authority remains from an original authorization of $22.4M in bonding which may be used for CERCLA match and for cleanup actions taken under the authority of the Environmental Repair Statute, which in practical application is only for landfill-type cleanups.

CLEANUP POLICIES AND CRITERIA

Wisconsin has promulgated groundwater, soil, and hazardous substance cleanup standards and uses water quality criteria, MCLs/MCLGs and background levels in determining cleanup levels.

PUBLIC PARTICIPATION

The 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. All files are open to the public with limited confidentiality and enforcement exceptions.

ENFORCEMENT

Liability

Under the Abandoned Container and Spill Laws liability is strict, joint and several, and proportional, 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 $5K per day are available, but there are no punitive damages. Criminal penalties are available if the case is flagrant.

Natural Resource Damages

The State has authority under Wis. Stat. §147.23 to address natural resource damages.

Property Transfer

No mandatory property transfer provision. The State is developing a database of known or listed sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State Contaminated Land Recycling Act (Wis. Stat. §§ 144.76 (13) and 144.765) allows an innocent property owner or purchaser to investigate and clean up the property in order for the buyer to become exempt from future liability associated with the past contamination. The DNR is developing a proposal to require disclosure on the deed or with the recorder of deeds that the site was or is contaminated with hazardous substances.

In 1994, the State established a voluntary cleanup program (Wis. Stat. § 144.765) in conjunction with the State cleanup program. Qualified purchasers are eligible to participate, in return for limited liability. The municipal grant element of this program is currently unfunded, but the State is proposing to collect fees.

FEDERAL/STATE PARTNERSHIPS

For FY95, Wisconsin has a CPCA, a SMOA, and SSCAs with U.S. EPA.

REGION VI

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

ARKANSAS

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	398
Proposed:	0	Identified as Needing Attention:	45
Deleted:	1	On Inventory or Priority List:	12

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.

The *Hazardous Waste Management Act* (HWMA), Ark. Code Ann. §8-7-201 (1979), provides authority for enforcement, a priority list, and public notice.

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 ten employees. Three to four attorneys from the Department's Legal Division work part time on a site-by-site basis. The program receives funding primarily from Federal Grants (90%) and from the State Cleanup Fund (10%).

CLEANUP ACTIVITIES

At NPL sites, Arkansas has no remedial actions underway. During FY95, four remedial actions were completed and six have been completed since the start of the program. At non-NPL sites there are currently two remedial actions underway. There were no remedial actions in the past fiscal year.

At NPL sites, there are no removals underway, and none were completed in the past fiscal year. Five NPL removals have been completed since the start of the program. At non-NPL sites, there are currently three removals underway. One removal was completed in FY95 and 31 have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substance Remedial Action Trust Fund (HSRAT), with a balance of $7,311,447 as of 6/30/95, is derived primarily from annual fees 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, and interest. During FY95 $1,650,542 was added to the HSRAT Fund, and $870,683 was paid out: $186,880 for NPL sites and $623,803 for non-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. The HSRAT Fund can also be used for program administration.

The Emergency Response Fund (ERF) had a balance of $138,603 as of 6/30/95, with additions of $259,915 during FY95. The ERF can be used only for emergency responses, removals, and site investigations. It is funded by civil penalties. From the ERF, $269,605 was paid for non-NPL sites during FY95. The ERF has a ceiling of $150K which may be on deposit at any one time; any additional funds are then deposited into the HSRAT Fund.

CLEANUP POLICIES AND CRITERIA

Cleanup standards are selected on a site-by-site basis and Federal guidelines are followed. Sites may be listed if they pose a potential substantial danger to human health or the environment. Waste cleanup standards in DPC&E Regulation No. 23, plus State air and water quality regulations, soil and groundwater levels, MCLs/MCGLs, risk assessments, EPA guidelines and background levels are all used by Arkansas as standards for hazardous waste cleanups.

PUBLIC PARTICIPATION

Public notice requirements, provisions for public comment, hearings and meetings and document availability are all provided by both statute and regulation. As a matter of policy, there is also precoordination of regulatory revisions with industry trade groups and environmental groups. 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 per 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 has authority independent of federal law to recover for NRDs (Ark. Code Ann. §8-4-103(b)(3)). Arkansas' NRD program started in November, 1993, by the signing of a memorandum of understanding with the U.S. Dept. of Interior. There are no NRD claims currently pending.

Property Transfer

No provision.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State does have a brownfields program as established by Ark. CodeAnn. §8-7-523. Sites covered by this program are those "abandoned sites" as defined by statute. There are currently no sites in the program. A voluntary cleanup policy is currently in draft.

FEDERAL/STATE PARTNERSHIPS

For FY95, Arkansas has a CPCA and SSCAs with U.S. EPA, and is negotiating a SMOA.

LOUISIANA

SITES

NPL Sites		State Sites	
Final:	14	Known and Suspected:	690
Proposed:	5	Identified as Needing Attention:	136
Deleted:	0	On Inventory:	690

STATUTORY AUTHORITIES

The *Hazardous Waste Control Law* (La. Rev. Stat. Ann. Title 30, §§2171-2206), the *Inactive and Abandoned Hazardous Waste Site Law* (La. Rev. Stat. Ann. §§2221-2226, as amended June 1995), and Chapter 12 entitled *Liability for Hazardous Substance Remedial Action* (La. Rev. Stat. Ann. §§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 with a total of 34 FTE employees. One DEQ lawyer provides enforcement support. The program receives funding from both Federal grants (50%) and the State cleanup fund (50%).

CLEANUP ACTIVITIES

At NPL sites, Louisiana has eight remedial actions (RAs) underway with no RA's completed during the last fiscal year. One RA at an NPL site has been completed since the start of the program. At non-NPL sites, seven RAs are currently underway. During the last fiscal year, 25 RAs at non-NPL sites have been completed. Since the start of the State program, 97 RAs have been completed at non-NPL sites.

At NPL sites, Louisiana has no removals currently underway. Two removals have been completed during the past fiscal year, and nine have been completed since the start of the program. Four removals are currently underway at non-NPL sites. Four have been completed during the past fiscal year, and 36 have been completed since the start of the program.

Since the start of Louisiana's program a total of 105 remedial actions and removals have been paid for by PRPs and 11 by the State.

CLEANUP FUNDING

The primary cleanup fund is the Hazardous Waste Site Clean-up Fund (HWSCF). The HWSCF's balance was $2,007,883 at the end of FY95. A total of $439,733 was paid out by the State: $331,583 for NPL sites and $108,150 for non-NPL sites. A total of $1,992,117 was obligated: $331,583 to NPL sites, and $1,660,534 to non-NPL sites. HWSCF has a cap of $4M. A portion of the taxes on hazardous waste generation, as well as sums recovered through judgments and settlements, are the sources of the HWSCF. The HWSCF can be used for emergency responses, removals and remedial actions, studies and design, and O&M. DEQ has the authority to seek recovery of State costs from PRPs once the work is done. For CERCLA NPL sites, the State 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 provides 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 may hold 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 for the recovery of remedial costs incurred by the State and has a statutory requirement that the landowner of an identified hazardous waste site record the location of the waste site in the mortgage and conveyance records of the parish in which it is located. The State maintains a database to track assessment and remediation of sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

As of yet, Louisiana does not have a Voluntary Cleanup Program. A voluntary cleanup bill (HB 1183) was enacted in July 1995 and becomes effective as soon as the DEQ adopts minimum requirement standards for soil, groundwater and surface water quality necessary for the remediation of contaminated property. Any future owner or potential purchaser is eligible to participate.

The State does not have a brownfields program. New Orleans has been given a federal grant of $200K by the EPA to establish a brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Louisiana has a CPCA, a SMOA, and SSCAs with U.S. EPA.

NEW MEXICO

SITES

NPL Sites		State Sites	
Final:	10	Known and Suspected:	278
Proposed:	1	Identified as Needing Attention:	182
Deleted:	1	On Inventory or Priority List:	56

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 Oversight Section of the Groundwater Quality Bureau has 17 FTE staff members. The NMED General Counsel's office provides legal support with .5 attorneys. New Mexico's program is primarily funded by Federal Grants (64%), a State General Fund (28%), and by private parties (8%).

CLEANUP ACTIVITIES

At NPL sites, seven remedial actions are currently underway. There were no new remedial actions initiated at NPL sites in the past fiscal year, and there has been one remedial action completed since the start of the program. At non-NPL sites, there are currently 37 remedial actions underway. Four non-NPL remedial actions were completed in the past fiscal year; 13 have been completed since the start of the program.

There are currently three removals underway at NPL sites. One NPL removal was completed in the past fiscal year and two have been completed since the start of the program. At non-NPL sites, three removals are underway. Since the start of the program, two removals have been completed. Over twenty non-NPL removals have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Waste Emergency Fund (Emergency Fund) is funded by penalties. The Emergency Fund had a balance of $1,204,500 at the end of FY95. A total of $43,020 was paid out in FY95, all to non-NPL sites. A total of $43,020 was obligated or encumbered, all to non-NPL sites. The Emergency Fund can be used for emergency responses.

The State Groundwater Remediation Fund (SRF) is funded entirely by appropriations. The SRF had no balance at the end of FY95. Additions amounting to $218,400 were made to

the fund during FY95, all of which was paid out for non-NPL cleanups. $218,400 was obligated and encumbered for non-NPL activities. The SRF can be used for program administration, site investigation, studies and design, removals, remedial actions and operation and maintenance.

CLEANUP POLICIES AND CRITERIA

The State uses background levels, EPA guidelines, risk assessments, State surface water and groundwater standards, water quality criteria, MCLs/MCLGs and soil remediation guidelines to establish cleanup levels. The State uses an additional lifetime cancer risk level of 10^{-6} in its risk assessments. Standards are human health-based and are set through a public hearing process.

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. Public notice requirements, public comment provisions, and hearings and meetings are established by regulation. Document availability is established by statute (Water Quality Act).

ENFORCEMENT

Liability

Enforcement authorities include orders for site access and information, administrative and consent order authority, injunctive actions, civil penalties and cost recovery authority. Civil penalties of $10K per day for water quality regulation violations, up to $15K per day for discharge permit violations, and up to $25K for compliance order violations are available. Figures for punitive damages are not available. Liability standards are strict, joint and several. 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

Although lacking statutory authority, New Mexico's NRD program began in July 1993 and has two CERCLA claims currently pending for $200K. There is currently one restoration action under way and $165K has been spent on restoration actions.

Property Transfer

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

VOLUNTARY AND BROWNFIELDS PROGRAMS

No voluntary cleanup program exists in New Mexico. Any responsible party, however, can enter into an agreement of cooperation with the State with the incentive of potential deferral from the NPL. The State is seeking to develop a structured voluntary cleanup program which would also address brownfields.

FEDERAL/STATE PARTNERSHIPS

For FY95, New Mexico has a CPCA, a SMOA, and SSCAs with U.S. EPA.

OKLAHOMA

SITES

NPL Sites		State Sites	
Final:	10	Known and Suspected:	767
Proposed:	0	Identified as Needing Attention:	162
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The *Environmental Quality Act*, Ok. Stat. Ann. Tit. 27A, §1-3-101 B.9, B.16 (1993), gives ODEQ jurisdiction over Superfund responsibilities under CERCLA. The *Environmental Quality Code*, Ok. Stat. Ann. Tit. 27A: §§2-1-1-1 *et seq.* includes: Oklahoma Hazardous Waste Management Act, §§2-7-101 *et seq.*; the *Hazardous Waste Fund Act*, §§2-7-301 *et seq.*; the *Oklahoma Solid Waste Management Act*, §2-10-101 *et seq*; §2-3-506/75: OS 1991 §309(d) which authorizes consent agreements and final orders; and §2-6-105 which declares that pollution of the State air, land or waters is a public nuisance. 50 OS 1991 §2-1 also defines public nuisance and liability of property owners, which allows the State to pursue successive owners.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Quality's Waste Management Division has a full time staff of 16 employees. Legal support is provided by one attorney from the Office of the Executive Director, the Office of General Counsel. 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 four NPL sites and one non-NPL site. In the past fiscal year, remedial actions have been completed at one NPL site and at no non-NPL sites. Since the start of the program, remedial actions have been completed at two NPL sites and one non-NPL site.

Removals are currently underway at one NPL site. There are no removals currently underway at non-NPL sites. In the past fiscal year, there were no removals at NPL sites and four removals at non-NPL sites. Thirteen removals at NPL sites and 23 removals at non-NPL sites have been completed since the start of the State's program.

CLEANUP FUNDING

The Hazardous Waste Fund, with a balance of $1,096,005 as of 6/30/95, is available for removals, emergency response, and CERCLA match. Its sources are penalties and fees. Additions to the fund during FY95 totaled $43,428. During FY95, $348,115 was expended

from the fund: $240,014 for NPL activities and $108,101 for non-NPL activities. Monies obligated and encumbered amounted to $348,115, with $240,014 for NPL sites and $108,101 for non-NPL sites.

The Environmental Trust Fund, a revolving fund, was established 7/1/93. As of 6/30/95, the fund had a balance of $1M. Additions to the fund for FY95 amounted to $1M. 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.

Responsible parties spent approximately $228K on State-supervised non-NPL cleanups in FY95.

CLEANUP POLICIES AND CRITERIA

A risk-based computer model is used to determine soil cleanup levels for the protection of groundwater, surface water, and human health through direct contact and ingestion. Water quality, MCLs/MCLGs, background levels, risk standard, EPA guidance, groundwater, and soil cleanup levels are used. In general, the State uses a 10^{-6} risk level for cancer, but will sometimes use a range from 10^{-4} to 10^{-6}. Oklahoma's Cumulative Hazard Index is 1.

PUBLIC PARTICIPATION

Public notice requirements, provisions for public comment, hearings and meetings, and document availability are all established by the National Contingency Plan (NCP). Groups are encouraged to apply for EPA TAG grants.

ENFORCEMENT

Liability

Oklahoma can impose joint and several liability and statutory liability under State nuisance laws. Civil penalties amounting to $10K/day are available under nuisance laws.

Natural Resource Damages

Oklahoma's natural resource damages program is under development.

Property Transfer

Oklahoma has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Oklahoma does have a voluntary cleanup program, established by OK Stat. Ann. Tit. 27A §2-3-506 and 75 OS 1991, §309(d), which relies on consent agreements and final orders for implementation. All property owners and PRPs of contaminated sites are eligible to

participate. Participation can potentially defer or preclude NPL status. State fees depend on oversight costs and are determined on a case-by-case basis.

The State's brownfields program is currently under development. Some voluntary cleanup sites are under pursuit for redevelopment, but the State has not actively targeted these sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Oklahoma has a CPCA, a SMOA, and SSCAs with U.S. EPA.

TEXAS

SITES

NPL Sites		State Sites	
Final:	27	Known and Suspected:	821
Proposed:	0	Identified as Needing Attention:	66
Deleted:	4	On Inventory or Priority List:	51

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, 1993 and 1995), establishes the Hazardous Waste Disposal Fee Fund (Fund 550) and a priority list. The 1991 amendment changed the fee structure, placing fees on products containing hazardous materials. The 1993 amendment added a treble damages provision. The 1995 amendment establishes the State's voluntary cleanup program (Texas Health and Safety Code Ch. 361.601-612).

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 2.5 attorneys in the TNRCC Legal Services Division. Funding for program administration is from State cleanup funds (80%) and from Federal grants (20%).

CLEANUP ACTIVITIES

At NPL sites, there are ten remedial actions underway. One remedial action was completed in FY95, and 13 have been completed since the start of the program. There have been no removals at NPL sites. At non-NPL sites, there are currently ten removals underway. In FY95, 3405 removals were completed at non-NPL sites; 16,633 removals have been completed since the start of the program. There are no remedial actions at non-NPL sites.

CLEANUP FUNDING

The Hazardous and Solid Waste Remediation Fee Fund (Fund 550) had a balance of $47,069,124 at the end of FY95 (9/1/94 - 8/31/95). Additions to the fund during FY95 totalled $26,571,123 with a total of $28,615,006 paid out. The fund is available for site investigation, studies and design, removals, emergency response, remedial actions, natural

resource assessment, 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 and interest.

The Spill Response Fund had a balance of $292K as of 8/31/95. There were no additions to the fund during FY95. It is available for removals and emergency response. Its major source is appropriations. 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 the community as interest warrants.

ENFORCEMENT

Liability

Comprehensive order and injunctive authority, civil penalties of up to $25K per 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. The proportional standard is used only when the preponderance of evidence proves divisibility of liability.

Natural Resource Damages

The Texas Natural Resource Trustee program is established by TNRCC: 30TAC 327.31, TGLO: 31TAC 20.1-20.4, 20.10, Texas Natural Resources Code 40.107(c) (4) Texas Oil Spill Prevention and Response Act, and deals exclusively with oil spills. There have been four NRD claims settled, two under CERCLA and three under the Oil Pollution Act. There are nine NRD claims pending administratively: five under the Oil Pollution Act and four

under CERCLA. The total amount of pending claims is currently not available. One restoration is currently underway. Three have been completed and two more are expected to be completed by September 1996.

Property Transfer

The Texas Property Code Chapter 5 requires that sellers of up to four 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Texas does have a voluntary cleanup program, established in September 1995 by statute (HB2296). All sites not subject to a permit or order are eligible to participate. Any person may apply to enter the program. No enforcement action may be initiated against the participant once in the program. Participants also receive quicker review and approval of low priority sites and there is also liability protection for lenders and future landowners. The State's participation is funded by State and federal funds and applicant fees. The State charges a service fee of $1K (and $60.80 per hr. after expenditure of the fee).

The State does not have a brownfields program. Brownfields are being targeted through the voluntary cleanup program. Sites not covered by an existing enforcement order are eligible. Ninety sites have entered the voluntary cleanup program. Most of these sites were abandoned and will be redeveloped upon certificate of completion issuance. Cleanup is underway at approximately 40 of these sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Texas has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

REGION VII

Iowa
Kansas
Missouri
Nebraska

IOWA

SITES

NPL Sites		State Sites	
Final:	18	Known and Suspected:	900
Proposed:	1	Identified as Needing Attention:	200
Deleted:	2	On Inventory or Priority List:	67

STATUTORY AUTHORITIES

The *Environmental Quality Act (EQA)*, Iowa Code Ch. 381-397 and 455B 423-431 (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, provides for site registry, and restricts property transfers. Significant amendments concerning cleanup authority for abandoned and uncontrolled sites were enacted in 1979, 1981, and 1987. A 1984 amendment establishes the 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

The Solid Waste Section of the Iowa Department of Natural Resources is responsible for program administration. There are currently 10.5 full time employees. Legal support is provided by DNR Compliance and Enforcement Bureau. 0.3 FTE attorneys from DNR Compliance and Enforcement Bureau work on the program. Eighty percent of funds for staff and administration are from Federal grants, 5% are from the State cleanup fund, and 15% are from a solid waste account.

CLEANUP ACTIVITIES

At NPL sites there are currently 14 remedial actions underway. Four remedial actions were completed in the past fiscal year at NPL sites and six have been completed since the start of the program. There are approximately ten removals underway at NPL sites. Two were completed in FY95.

At non-NPL sites, approximately 25 remedial actions are underway. There were no remedial actions completed at non-NPL sites in FY95.

CLEANUP FUNDING

The Hazardous Waste Remedial (HWR) Fund had a balance of $1.3M as of the end of FY95. Approximately $300K was added to the fund in FY95 primarily from fees on the

transportation, treatment and disposal of hazardous waste. Approximately $15K was paid out during FY95: $1K was spent on NPL activities and $24K were spent on non-NPL activities. $25K was obligated and encumbered during FY95: $5K to NPL activities and $20K to non-NPL activities.

The HWR Fund can be used for administration, site investigation, emergency response, removals, remedial actions, O&M, CERCLA match, studies and design, and grants to local government. 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 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

State policy provides for public notice, provisions for public comment, and hearings and meetings. Document availability requirements are established by statute.

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 per day for failure to notify, up to $10K per day for water or air violations, and treble damages for willful failure to clean up.

Natural Resource Damages

Iowa does have authority independent of federal law to recover for natural resource damages (Iowa Code 455B. 392c.). 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. The Environmental Protection Agency is currently working on natural resource damages at one site.

Property Transfer

The *Groundwater Hazard Documentation 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Iowa does not have voluntary cleanup or brownfields programs. The U.S. EPA has offered seed money to Iowa for a brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Iowa has a CPCA and SSCAs with the U.S. EPA, and is negotiating a SMOA.

KANSAS

SITES

NPL Sites		State Sites	
Final:	11	Known and Suspected:	609
Proposed:	2	Identified as Needing Attention:	324
Deleted:	13	On Inventory or Priority List:	494

STATUTORY AUTHORITIES

The *Environmental Response Act (ERA)*, K.S.A. §65-3453 *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.

The *Kansas Water Plan*, K.S.A. §§82a-927 through 82A-953, established the State Water Plan/Contamination Remediation Account, and provides for cleanup authorities.

The *Water Pollution Control Statutes*, K.S.A. §§65-171 et seq., provides enforcement authority for cleanup of contaminated soils.

The *Kansas Drycleaner Environmental Response Act*, K.S.A. §§65-34-141 through 65-34-155 (1995), establishes the Drycleaning Trust Fund, and provides for cleanup authorities and a priority list.

PROGRAM ORGANIZATION AND FUNDING

The Kansas Department of Health and Environment's (DHE'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. The BER has a staff of 103 FTEs and special project officers, with 26 FTEs working specifically on remediation. Legal support is provided by the Office of Legal Services of the DHE; three FTE attorneys work on the program. Funding for staff and program administration comes from a variety of sources including the State General Fund, Federal Grants, the Environmental Response Fund, State Water Plan, Underground Storage Tank Funds, the Dry Cleaning Trust Fund and the Above Ground Storage Tank Fund. Landfill and mining fees and aboveground tank registrations are also a source of revenue.

CLEANUP ACTIVITIES

Currently, remedial actions are underway at eight NPL sites and approximately 285 non-NPL sites. In the last fiscal year, three remedial actions were completed at NPL sites and 13 were completed at non-NPL sites. Four remedial actions at NPL sites and 91 at non-NPL sites have been completed since the start of the State program.

Five removals at non-NPL sites are underway. There are no removals currently underway at NPL sites. In the last fiscal year, approximately three removals were completed

at NPL sites and two were completed at non-NPL sites. Since the start of Kansas' program, approximately 15 removals have been completed at NPL sites and ten have been completed at non-NPL sites.

A total of 12 remedial actions and removals have been paid for by the State since the start of the program. Approximately 89 have been paid for by responsible parties.

CLEANUP FUNDING

The State Environmental Response Fund had a balance of $225K at the end of FY95 with additions of $596K being made to the fund during the fiscal year. A total of $467K was paid out of the fund all to activities at non-NPL sites. $154K was obligated or encumbered to activities at non-NPL sites. The fund can be used for site investigation, studies and design, removals, emergency response, remedial actions, program administration and oversight of responsible party remedial activities. Cost recoveries are the significant source of monies for the fund. The statute authorizes penalties and transfers as sources of revenue for this fund, however, these sources were not realized.

The State Water Plan-Contamination Remediation Account is the primary cleanup account. At the end of FY95, it had no balance. A total of $1.5M was added to the fund during FY95, with $1.4M being paid out to activities at non-NPL sites. A total of $1.25M was obligated or encumbered to activities at non-NPL sites. Fees comprise the major source of revenue for the State Water Plan, which can be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, operations and maintenance, and program administration.

The State General Fund had no balance at the end of FY95. $497K of additions were made to the account during the fiscal year. Expenditures amounting to $493K were made to non-NPL sites. A total of $16K was obligated or encumbered to non-NPL activities. Appropriations constitute the significant source of funds for the State General Fund, which can be used for site investigation, emergency response, CERCLA match, and program administration.

The Drycleaning Trust Fund was established in July of 1995 and currently has no balance. The fund can be used for studies and design, site investigation, removals, emergency response, remedial actions, and program administration. Funds derive primarily from fees.

CLEANUP POLICIES AND CRITERIA

BER uses groundwater cleanup target concentrations which the Bureau of Water has established. The State uses relevant State guidance (Kansas Action Levels), water quality criteria, MCLs/MCLGs, and background levels. Risk levels ranging from 10^{-4} to 10^{-5} are used.

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. 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. Kansas can impose liability under State law for the cleanup of substances disposed of before the State program was enacted.

Natural Resource Damages

Kansas has authority independent of federal law to recover for natural resource damages under K.S.A. 65-171-U. The State commenced seeking NRDs in the mid 1980s. Approximately 15 NRDs have been recovered at a total of $150K. Four claims are currently pending for a total amount less than $10K. There are currently no natural resource restorations underway. Approximately 15 restorations have been completed.

Property Transfer

No property transfer provisions have been established.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Kansas has neither a voluntary cleanup nor a brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Kansas has a CPCA and SSCAs with the U.S. EPA, and is negotiating a SMOA.

MISSOURI

SITES

NPL Sites		State Sites	
Final:	22	Known and Suspected:	1475
Proposed:	0	Identified as Needing Attention:	200
Delisted:	1	On Inventory or Priority List:	52

STATUTORY AUTHORITIES

The *Missouri Hazardous Waste Management Law*, Mo. Rev. Stat. §§260.350 - 260.575 (1977, as amended in 1980, 1983, 1985, 1987, 1988, and 1993) authorizes the Hazardous Waste Remedial Fund and provides for a priority list, strict liability, site access, administrative order authority, penalties, and punitive damages. The Voluntary Cleanup Law (passed in 1993 as S.B. 80), Mo. Rev. Stat. §§260.565-575, provides authority for establishing a Voluntary Cleanup Program.

PROGRAM ORGANIZATION AND FUNDING

The cleanup program in Missouri is administered by the Department of Natural Resources, Division of Environmental Quality, Hazardous Waste Program with 48 FTE staff members: 19 in the Superfund Section; three in budget and planning; ten in Environmental Services, 12 in federal facilities, and four in voluntary cleanup. Other support agencies include the Division of Geology and Land Survey and the Missouri Department of Health. The Attorney General's office provides legal support with one FTE. Funding for staff and administration comes 80% from federal grants and 20% from the State's cleanup fund.

CLEANUP ACTIVITIES

There are 12 remedial actions underway at non-NPL sites. Twenty-one remedial actions have been completed at non-NPL sites since the start of the program, including four during the last fiscal year. Approximately 30 removals are underway at non-NPL sites. Seventy-nine removals have been completed at non-NPL sites since the start of the program, including three during the last fiscal year.

Eight remedial actions and seven removals are underway at NPL sites. Since the start of the program, ten remedial actions and 18 removal actions have been completed at NPL sites.

CLEANUP FUNDING

The Hazardous Waste Remedial Fund has a balance of $5.3M (6/30/95). Funds are primarily provided by taxes on hazardous waste generators based on tonnage and the method of handling waste. There is a $1.5M per year cap on this tax. Fees on landfilled waste also contribute to the Fund. Cost recovery, penalties and fines, interest, and appropriations

are all potential contributors. During the last fiscal year, fund revenues were $2.7M and expenditures were $2.8M. The Fund may be used for site investigation, emergency response, removals, studies and design, remedial actions, CERCLA match, operations and maintenance, program administration, health studies, acquisition of property, and study of 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 assessment, groundwater standards, soil standards, and EPA guidelines may be used to set criteria. The State Health Department provides site-specific "any-use soil level" recommendations. Risk levels are usually set at 10^{-5}.

PUBLIC PARTICIPATION

Public notice, comment, and document availability are required by statute (Chapter 610). In addition, 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.

ENFORCEMENT

Liability

Strict and retroactive liability applies. Treble damages are available to the State. The State seeks RP cleanup first. Violations of property transfer or change of use laws may be subject to a penalty of $1K per 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.

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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The Voluntary Cleanup Program, established by statute in 1993 and effective in 1994, is administered by a separate unit. Participation is open to any site *except* those with

imminent and substantial threats to public health or the environment, sites where a PA/SI has been performed and NPL listing is pending, RCRA facilities, or sites where enforcement action is warranted. The Department issues a "Clean Letter" upon completion of a voluntary cleanup. Participants pay the State's actual costs and overhead (actual x 2.5). $200 is payable as an application fee and a $5K initial deposit is made toward the costs.

The Brownfields Program is also established by statute, Mo. Rev. Stat. §§ 4471.700 to 447.718; it began in August 1995. It is administered by the economic development agency, which consults with DNR under the voluntary cleanup program. Sites must have been abandoned for three years and be owned by a governmental entity in order to participate.

FEDERAL/STATE PARTNERSHIPS

For FY95, Missouri has a CPCA and SSCAs with the U.S. EPA, and is negotiating a SMOA.

NEBRASKA

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	400
Proposed:	2	Identification as Needing Attention:	200
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 to set standards for cleanups; Title 119 deals with NPDES; Title 122, deals with underground injection (UIC); and Title 128, covers hazardous waste rules and regulations.

The *Remedial Action Plan Monitoring Act* (LB 1349 §81-15,181 to 81-15,188) established Nebraska's voluntary cleanup program effective as of January 1, 1995.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Air and Waste Management Division of the Department of Environmental Quality has 17 FTE staff. Legal support is provided by one DEQ attorney. The majority of the program's funding comes from Federal grants (90%), the rest being supplied by State general funds (8%), and voluntary cleanup costs (2%).

CLEANUP ACTIVITIES

At NPL sites, two remedial actions are currently underway, one remedial action was completed during the past fiscal year, and one has been completed since the beginning of the program. Currently, there are three removals underway at NPL sites. Two removals have been completed in the past fiscal year, and two since the start of the program. There have been no activities at non-NPL sites.

CLEANUP FUNDING

Nebraska has no State cleanup fund.

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. Risk levels are site specific but the State generally uses risk levels of 10^{-4} - 10^{-6}.

PUBLIC PARTICIPATION

Tit. 118 requires RPs to submit a 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. Hearings and meetings are also required by regulation.

ENFORCEMENT

Liability

Tit. 118 authorizes Nebraska to issue administrative orders and injunctions against RPs causing 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 penalties or punitive damages.

Natural Resource Damages

Nebraska has no program.

Property Transfer

Nebraska has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Anyone is eligible to participate in Nebraska's voluntary cleanup program. Participants will receive a letter from the State indicating the site has been cleaned up to the State's satisfaction. The program was established in 1995. The State's participation is funded by PRPs. The State's fees include a $5K application fee and a $5K participation fee. Nebraska does not have a brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Nebraska has a CPCA and SSCAs with U.S. EPA, and is negotiating a SMOA.

REGION VIII

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

COLORADO

SITES

NPL Sites		State Sites	
Final:	17	Known and Suspected:	225
Proposed:	2	Identified as Needing Attention:	225
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.* The *Voluntary Cleanup and Redevelopment Act*, Colo. Rev. State §§25-16-301 *et seq.* provides for voluntary cleanup.

PROGRAM ORGANIZATION AND FUNDING

Within the Department of Public Health and Environment, the Hazardous Materials and Waste Management Division contains 18.5 full-time staff working on Superfund. Ten 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 actions at proposed NPL sites). Three 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 $13.4M as of the end of the fiscal year (6/30/95), 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 FY95 totaled $3.3M. Obligations from the fund during FY95 totaled $10M; expenditures totaled $2.8M.

The Natural Resource Damages Fund had a balance of $2.8M as of 6/30/95. Its sources are natural resource damages settlements and interest, and it may be used for natural resource restoration in accordance with CERCLA. 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. The State has used its hazardous waste law at Rocky Flats and Rocky Mountain Arsenal.

Natural Resource Damages

The State's natural resource damages (NRD) program began in 1987 and has recovered approximately $5.7M to date. The State Attorney General has filed 7 NRD lawsuits, of which five 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The *Voluntary Cleanup and Redevelopment Act* of 1995 established a program under which all sites except UST, RCRA, NPL, and CWA sites are eligible for participation. Participants are eligible for no further action needed agreements with the State. Colorado's participation is funded by a $2K per site fee.

Though Colorado has no official brownfields program or written policy, the State is working on three EPA pilot brownfield sites.

FEDERAL/STATE PARTNERSHIPS

For FY95, Colorado has a CPCA, a SMOA, and SSCAs with U.S. EPA.

MONTANA

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	277
Proposed:	1	Identified as Needing Attention:	240
Deleted:	0	On Inventory or Priority List:	277

STATUTORY AUTHORITIES

The *Comprehensive Environmental Cleanup and Responsibility Act* (CECRA), Mont. Code Ann. §§75-10-701 through -738, (1989, as amended 1991, 1993, and 1995), provides enforcement authority, establishes the Environmental Quality Protection Fund, provides a priority list, and allows for a voluntary cleanup program.

State Participation in CERCLA, Mont. Code Ann. §§75-10-601 through -627 (1983, as amended 1987, 1993, and 1995), establishes the Hazardous Waste/CERCLA Special Revenue Account and gives the State bonding authority.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Environmental Remediation Division of the Department of Environmental Quality (MDEQ) has 25 full-time employees on Federal and State Superfund programs. Legal support is provided by four assistant Attorneys General assigned to the Superfund Section. Funding for State program administration is provided by the State cleanup fund, while funding for the State administration of the Federal program is provided by Federal grants. Administration of some special projects is funded by PRP direct funding.

CLEANUP ACTIVITIES

Nine remedial actions are currently underway at NPL sites, and remedial actions have been completed at 14 NPL sites since the start of the program. Removals are currently underway at eight NPL, and removals have been completed at 13 NPL sites since the start of the program. Montana classifies cleanups as interim or final, not remedial actions or removals. Cleanups at non-NPL sites are not tracked based on a fiscal year basis, so no data for FY95 is available. Fourteen interim cleanups are currently underway, and 93 interim cleanups have been completed since the start of the program. Final cleanups are underway at seven non-NPL sites, and 34 final cleanups have been completed since the start of the program. At non-NPL sites, five cleanups were paid for out of the State fund and the rest were covered by responsible parties. Federal facilities make up 30 of the non-NPL sites and none of the NPL sites.

CLEANUP FUNDING

The Environmental Quality Protection Fund (EQPF), with a balance of $1.4M as of the end of the last fiscal year (6/30/95), is available for site investigation, studies and design, removals, emergency response, remedial actions, operations and maintenance, program administration, and natural resource restoration. The fund interest is appropriated. 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 FY95 totaled $674K. During FY95, nothing from the EQPF was spent at NPL sites, and $690K at non-NPL sites.

The Hazardous Waste/CERCLA Special Revenue Account is available for CERCLA match, site investigation, remedial actions, emergency response, operation and maintenance, and program administration. 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. The amount of additions to the account during FY95 are not available. During FY95, expenditures from the account totaled $19K, all of which was spent on NPL sites.

In addition, Federal Agreements resulted in $1.6M paid out during FY95 to NPL sites, while a Direct PRP Fund resulted in $320K paid out during FY95 to NPL sites and $150K to non-NPL sites.

CLEANUP POLICIES AND CRITERIA

CECRA requires cleanup that assures 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 applies cleanup criteria on a site by site basis. The State uses water quality criteria, MCLs, background levels, risk assessments, EPA guidelines, groundwater standards, and EPA soil screening levels in absence of risk assessment. Site-specific criteria may also be imposed. The State selects cleanup levels through an ARARs-type process and uses a risk level of 10^{-5} for risk assessments. It is required to select cleanups that demonstrate acceptable mitigation of exposure to risks to the health, safety, and welfare of the public and the environment, that are effective and reliable, that use alternative treatment technologies or resource recovery technologies, that are technically practicable and implementable, and that are cost-effective.

PUBLIC PARTICIPATION

CECRA requires public notice and comment for remedial actions, administrative orders, and consent decrees. CECRA also requires notice to local governing bodies and city commissioners and, at their request, a public meeting must be held. New amendments provide for notice and comment on voluntary cleanup plans. The agency typically allows for more participation than is required by CECRA.

ENFORCEMENT

Liability

Under CECRA, the State can impose strict, joint and several, and retroactive liability. If a PRP is held jointly and severally liable, it may then ask the court to apportion liability among the PRPs, but MDEQ is not involved. MDEQ is required to make a good-faith effort to have RPs carry out cleanup acitivities 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 per day and civil penalties of $10K per day per violation. Treble damages are also available. The 1995 amendments provide for a two-year pilot study of the use of proportional liability.

Natural Resource Damages

Montana's natural resource damages program, which is separate from the Superfund Section, was started in 1991 and has approximately seven staff members who are affiliated with the Attorney General's Office. The State sued the Atlantic Richfield Company (ARCO) in 1983 for natural resource damages resulting from ARCO's mining and mineral processing activities at four NPL sites in the Upper Clark Fork River Basin. This case is currently pending for a claim of $713M.

Property Transfer

Montana has no property transfer provisions, but has a publicly available database with the locations and descriptions of hazardous waste sites.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Since May 1, 1995, Montana has a voluntary cleanup program as part of its State superfund statute (§§75-10-730 through -738); a six-year sunset clause applies. Any person or entity is eligible to participate in the voluntary cleanup program. The State approves a voluntary cleanup plan and supervises a public comment process on the draft plan. The participant has two years to execute the plan and cannot deviate from the agreed upon course of action. The participant must reimburse the State for all costs connected to administration of the voluntary program. Cost recovery is based on actual cost; there is no standard fee. Incentives for participation in the program include a letter of no further action. The first application received is for a $300K cleanup.

Montana does not have a separate brownfields program, but prospective purchasers can participate in the voluntary cleanup program with the owner's permission to facilitate the redevelopment of brownfields.

FEDERAL/STATE PARTNERSHIPS

For FY95, Montana has a CPCA and SSCAs with U.S. EPA.

NORTH DAKOTA

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	72 (CERCLIS)
Proposed:	0	Identified as Needing Attention:	0
Deleted:	1	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

North Dakota does not have its own State superfund law. The *Hazardous Waste Management Act* (HWMA), N.D. Cent. Code §§23-20.3-01 to -10 (1981, as amended 1983, 1987, 1991, and 1994) provides authority that can be used in conjunction with cleanups, but it is limited.

The *Water Pollution Control Law*, N.D. Cent. Code §61-28-01 *et seq.* (1967), provides most of the enforcement authority actually used for cleanups.

In 1989, the State enacted the *Environmental Quality Restoration Fund*, N.D. Cent. Code §§23-31-01 to 03. This fund applies to all environmental programs, and provides cost recovery authority.

PROGRAM ORGANIZATION AND FUNDING

The State does not have a formal superfund program. The lead agency is the Division of Waste Management, in the Environmental Health Section of the Department of Health. There are five staff in the Hazardous Waste Program within the Division. An Assistant Attorney General is assigned to the Department to provide legal support for all environmental programs. No employees work solely on Superfund. The Hazardous Waste Program operates on EPA grants.

CLEANUP ACTIVITIES

A remedial action is currently underway at one NPL site, and one remediation has been completed since the start of the program.

CLEANUP FUNDING

The two main sources for the Environmental Quality Restoration Fund are cost recovery monies and contributions from settlements. The fund may be used for emergency response, removals, and remedial actions. The fund balance was $129K as of the end FY95. No monies were added, paid out, obligated or encumbered during FY95.

CLEANUP POLICIES AND CRITERIA

The State does not have specific cleanup standards for hazardous substances. Cleanup levels are determined on a site-by-site basis using water quality criteria, MCLs and MCLGs, background levels, groundwater standards, soil standards, and Federal guidelines.

PUBLIC PARTICIPATION

There is no statutory requirement for public participation, but the Division notifies local officials with information about a site. Local communities can be involved in site activities.

ENFORCEMENT

Liability

HWMA provides for retroactive liability, and a choice between joint and several or proportional liability. It also authorizes administrative orders, injunctive relief, and civil and criminal penalties.

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.

Natural Resource Damages

No program has been established.

Property Transfer

No program has been established.

VOLUNTARY AND BROWNFIELDS PROGRAMS

North Dakota does not have a voluntary cleanup program or a brownfields program.

FEDERAL/STATE PARTNERSHIPS

North Dakota currently has no partnerships.

SOUTH DAKOTA

SITES

NPL Sites		State Sites	
Final:	3	Known and Suspected:	1065
Proposed:	0	Identified as Needing Attention:	241
Deleted:	1	On Inventory or Priority List:	1065

STATUTORY AUTHORITIES

The *Regulated Substance Discharge Law*, S.Dak. Codified Laws Ann. §34A-12 (1988, as amended 1989, and 1995), establishes the Regulated Substance Response Fund which provides for a cleanup fund, strict liability, administrative order authority, civil injunctive relief, cost recovery, and liens.

The *Hazardous Waste Management Act*, S.Dak. Codified Laws Ann. §34-11 (1983, as amended in 1988, and 1995), establishes standards for treatment, storage and disposal of hazardous wastes, and provides for site access, and civil and criminal penalties.

The *Water Pollution Control Act*, S.Dak. Codified Laws Ann. §34A-2 (as amended to July 1, 1995), prohibits the degradation of all ground and surface waters of the State, establishes standards for groundwater remediation, and imposes criminal and civil penalties for violations.

The *Environmental Protection Act*, S.Dak Codified Laws Ann. §34A-10 (as amended to July 1, 1995), provides for a wide range of civil legal remedies including injunctive relief to abate regulated substance discharges.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environment and Natural Resources (DENR) is the lead agency. State activities have been PAs, and supporting EPA in the Superfund processes performed with EPA funding. The Groundwater Quality Program in the Division of Environmental Regulation has three FTEs dedicated to these activities. Five lawyers in the Attorney General's office work on natural resource issues, providing 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, determined to require no action, or determined not to meet standards and classified as "inactive closed."

Currently, 241 sites are open, and 824 sites have been closed. A total of 63 sites were closed during the fiscal year (ending 6/30/95). Remediation is currently underway at one

NPL site, and a removal is underway at one NPL site. One NPL removal has been completed since the start of the program.

CLEANUP FUNDING

The Regulated Substances Response Fund had a balance of $1.75M at the end of FY95. 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. In FY95, a total of $131K were added to the fund, and $61K were paid out or obligated. Current funding sources are penalties, cost recovery, and interest.

The fund may be used for emergency response, removals, site investigations, studies and design, remedial actions, natural resource restoration, and operations and maintenance activities, with some restrictions.

CLEANUP POLICIES AND CRITERIA

The State determines cleanup criteria on a site by site basis. Groundwater standards are used where appropriate. The State risk level of 10^{-5} is used for benzene in soil. MCLs/MCLGs, background levels, water quality criteria, and EPA guidelines are also used to establish cleanup levels.

PUBLIC PARTICIPATION

S.Dak. Codified Laws Ann. §1-40-31 provides for document availability for all DENR programs. State policy establishes provisions for public notice, public comment and public meetings. The State also had negotiated rule-making in its regulatory development.

ENFORCEMENT

Liability

The law authorizes orders and injunctive actions to cause the responsible person to take corrective actions following the discharge of a regulated substance. The law defines liability for expenditures by the Department as strict, and joint and several, and provides for a lien on property cleaned up by the Response Fund. The State may levy a civil penalty of $10K per day per incident.

Natural Resource Damages

The State has NRD authority under S.Dak. Codified Laws Ann. §§34A-2-75, 34A-11-14, and 34A-10. No NRD claims have been pursued using State or Federal law. A total of $30K were expended on one natural resource restoration, which was completed in FY95 as part of a PRP settlement.

Property Transfer

The State has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

South Dakota does not have a voluntary cleanup program. The State does not have a formal brownfields program either, but it does assist local communities in obtaining federal brownfields funds.

FEDERAL/STATE PARTNERSHIPS

For FY95, South Dakota has a CPCA and SSCAs with the U.S. EPA.

UTAH

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	220
Proposed:	2	Identified as Needing Attention:	-
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The *Hazardous Substances Mitigation Act,* Utah Code Ann. §19-6-301 *et seq.* (1991, as amended 1995), provides enforcement authority, establishes the Hazardous Substance Mitigation Fund (HSMF), and provides for a priority list.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Branch of the Department of Environmental Quality (DEQ), Division of Environmental Response and Remediation has 34 staff members. Legal support is provided by one attorney in the Division of Environmental Response and Remediation and one attorney 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 nine NPL sites. Although no remediations at NPL sites have been completed in FY95, two have been completed since the beginning of the program. Three removals are currently underway at NPL sites, while four were completed during FY95. There are 30 remedial actions underway at non-NPL sites. Two remedial actions were completed during FY95, and nine have been completed since the start of the program. Responsible parties paid for all remediation and removal at non-NPL sites.

CLEANUP FUNDING

The Hazardous Substance Mitigation Fund (HSMF) had a balance of $5.1M as of 6/30/95. It is available for site investigation, studies and design, removals, emergency response, CERCLA match, and operations and maintenance. Its primary source is appropriations, while a minor amount also comes from interest. The Act also allows voluntary contributions to the Fund and private donations constitute a very minor source. A recent bankruptcy settlement added substantially to the fund, but is earmarked for a specific NPL site. During FY95, $160K were added to the Fund and $188K were paid out to non-NPL sites. Appropriations are requested project by project, so that the entire fund is obligated at all times.

CLEANUP POLICIES AND CRITERIA

The State has adopted a flexible cleanup policy which addresses sites on a case-by-case basis under the ARARs process as provided by CERCLA. It also 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 water quality criteria, MCLs/MCLGs, risk standard assessment, groundwater standards, and 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. The most recent larger voluntary agreements are beginning to include public participation on a more regular basis through use of citizen advisory committees.

ENFORCEMENT

Liability

The State uses strict and proportional liability standards, where appropriate. Joint and several liability is explicitly not authorized. No punitive damages are available. Civil penalties of up to $10K per day are available under the UST program. The State program can impose liability under State law for cleanup of substances disposed of only after 3/18/1985.

Natural Resource Damages

Utah does not have a formal natural resource damages program. However, in 1986, the State filed one case and received a $37M settlement in 1995. Of the settlement, $9M will be placed in a trust fund to be expended to restore surface or groundwater resources, and the remaining $28M will be set aside as a letter of credit for use in remediation actions.

Property Transfer

Utah does not have property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Utah has had a voluntary cleanup program for contaminated sites as a part of the State cleanup program since 1991. Any responsible party is eligible to participate. There is no specific incentive to encourage participation. State participation is funded through reimbursement by PRPs, or the State General Fund. The State may charge $60 per hour for its services. There have not been many voluntary cleanups done so far, but interest has increased recently.

The State does not have a brownfields program. However, redevelopment of industrial properties through the voluntary cleanup program is strongly encouraged.

FEDERAL/STATE PARTNERSHIPS

For FY95, Utah has a CPCA, a SMOA, and SSCAs with U.S. EPA.

WYOMING

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	140
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 (DEQ), 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 five attorneys in the Attorney General's Office. Approximately 80% of funding for program administration comes from Federal grants, while 20% comes from permit fees.

CLEANUP ACTIVITIES

Remedial actions are underway at two NPL sites. No NPL sites have been fully remediated. No removals are currently underway at NPL sites. At least two 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 a Hazard Index of 1 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 per day are available for violations of the EQA. For willful and knowing violations, penalties of up to $25K per 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State does not have a voluntary cleanup program or a brownfields program.

FEDERAL/STATE PARTNERSHIPS

Wyoming has no federal/State partnership agreements.

REGION IX

Arizona
California
Hawaii
Nevada

ARIZONA

SITES

NPL Sites		State Sites	
Final:	11	Known and Suspected:	1620
Proposed:	0	Identified as Needing Attention:	400
Deleted:	0	On Inventory or Priority List:	27

STATUTORY AUTHORITIES

The *Environmental Quality Act*, Ariz. Rev. Stat. (ARS), Tit. 49, Ch. 281 to 287 (1986, as amended 1987, 1990, 1992, 1994, and 1995), 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, treble damages, and requires the Department to set risk-based remediation standards for residential and non-residential use. The 1992 Amendments, ARS, 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. ARS, Tit. 49, Ch. 295 (1992) provides for environmental lien authority.

PROGRAM ORGANIZATION AND FUNDING

The Remedial Projects Section in the Waste Programs Division, Department of Environmental Quality (DEQ), has 24 full-time staff members and three in-house paralegals for legal support working on non-NPL sites. The Office of the Attorney General provides two attorneys.

The Fund covers 66% of administrative costs, with Federal grants providing the remaining 34% of the funding.

CLEANUP ACTIVITIES

Remedial actions are currently underway at six NPL sites with eight sites completed since the start of the program and three completed in FY95. No removals are currently underway, nor were any completed in FY95, at NPL sites, but four have been completed since the start of the program.

Remedial actions are underway at 12 non-NPL sites. Thirteen actions have been completed since the start of the program; two completed in FY95. Removals are currently underway at one non-NPL site. Fifty-six removals at non-NPL sites have been completed since the start of the program and six removals were completed in FY95.

CLEANUP FUNDING

The Water Quality Assurance Revolving Fund had a balance of $1.28M at the end of the fiscal year (6/30/95). Additions totalled $1.55M during FY95. Expenditures for non-NPL sites totaled $1.12M.

The Fund consists of monies from cost recoveries and a variety of fees including fertilizer license, pesticide registration, industrial discharge registration, aquifer protection permit application, solid waste landfill registration, and hazardous waste facility fees. Appropriations are a significant source of Fund monies. A water quality assurance tax, penalties and bonds 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, loans to local government, and operations 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 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

Liability is strict, joint and several, and retroactive. The State prefers to work with steering committees which apportion liability. Civil penalties are $5K per day, plus three 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 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). The lien is not superior to prior recorded liens. Arizona Real Estate Department rules require an agent to disclose any material fact that may affect the value of a property. The Real Estate Department has a policy stating that environmental issues, such as actual or potential contamination, are material facts, and advises owners to disclose their existence.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has a voluntary cleanup program (ARS §49-285.B), established in 1992, in which any person other than the State can participate. The program enhances volunteers' cost recovery capabilities and participants may be able to obtain a covenant not to sue. The State's participation is funded by reimbursement from volunteers.

The State has no brownfields program, but is targeting brownfields sites through the voluntary program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Arizona has a CPCA, a SMOA, and SSCAs with U.S. EPA.

CALIFORNIA

SITES

NPL Sites		State Sites	
Final:	95	Known and Suspected:	4,809
Proposed:	1	Identified as Needing Attention:	1,079
Deleted:	1	On Inventory or Priority List:	293

STATUTORY AUTHORITIES

The *Hazardous Substance Account Act*, Cal. Health & Safety Code §§25300 *et seq.* (1981, as amended every year 1982 - 1984 and 1986 - 1995) which includes the *Hazardous Substance Cleanup Bond Act of 1984*, §§25385 - 25386.6, and the *Hazardous Substance Cleanup Financing Authority Act*, §§25392 - 25395 (1984), establishes the site mitigation program and provides a 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 (DTSC), Site Mitigation Program is staffed with 297.34 people, in four regional offices and headquarters who work on NPL and non-NPL sites. The Department's Office of Legal Counsel and Criminal Investigation has eight attorneys assigned to the Site Mitigation Program, and the Attorney General's Office provides another four to five 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 $59.4M, of which $4M is for direct site cleanup.

CLEANUP ACTIVITIES

CalSites, the State inventory of sites, is being reevaluated to delete or exclude any sites where there is no evidence of a release. Since this CalSites Validation Program began in the fall of 1993 the original list of more than 26,500 sites has been reduced to 4800, with further delistings every month. Since the start of the State's cleanup program, eight remedial actions have been completed at NPL sites and 238 at non-NPL sites. Remediation is currently underway at 204 non-NPL sites (FY96). During FY95, remedial actions were completed at ten NPL and 11 non-NPL sites. Since the start of the State's program, 155 removals have been completed at NPL sites and 457 at non-NPL sites. During FY95, 21 removals were completed at NPL and 49 at non-NPL sites.

CLEANUP FUNDING

The Hazardous Waste Control Account (HWCA) had a balance of $56M at the end of FY95 (6/30/95). Fees were the major source of funding, with cost recoveries contributing approximately 12% of the total. The fund may be used for site investigation, studies and design, removal and remedial actions (prohibited until RPs are given notice and opportunity to cleanup), emergency response, O&M, State CERCLA match, program administration, and enforcement against RPs.

The Hazardous Substance Cleanup Bond Fund had a balance of $3.4M at the end of FY95. 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, and operations and maintenance.

CLEANUP POLICIES AND CRITERIA

Site-specific cleanup levels are based on acceptable risks, future land use, and the NCP's nine 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 and risk assessments 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. DTSC generally proceeds under CERCLA to recover its costs. The State has civil or administrative penalty authority for up to $25K per day for violating an order/agreement, and criminal penalties up to $25K per day and/or imprisonment for up to one year. Treble punitive damages are available. There is a citizen suit provision under Proposition 65. An RP 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 three times their share of cleanup costs. The cooperative RPs get 50% of the award and the Department gets 50% of the award.

Natural Resource Damages

DTSC and the Department of Fish and Game have been designated as the State's Trustees for natural resources. DTSC frequently files claims under CERCLA and OPA as well as State law. The Department of Fish and Game has been working with natural resource damages 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. The DTSC has recovered $23,855,533 for three major NRD cases. Approximately 25 full-time staff members manage DTSC's natural resource damages 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has a Voluntary Cleanup Program for sites that present low threat levels. Participant sites are not listed, and the program gives responsible parties more control over cleanup. The program, which was established in 1994, is funded 100% by responsible parties.

Although there is no official brownfields program, the State targets brownfields through a variety of programs: VCP, CalSites Validation Program, Annual Workplan Sites, regional groundwater plumes, and contaminated aquifers (innocent landowners relieved of liability).

FEDERAL/STATE PARTNERSHIPS

For FY95, California has a CPCA, a SMOA, and SSCAs with U.S. EPA.

HAWAII

SITES

NPL Sites		State Sites	
Final:	4	Known and Suspected:	200
Proposed:	0	Identified as Needing Attention:	25
Deleted:	0	On Inventory or Priority List:	1

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, and retroactive 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 22 full-time employees, who handle all aspects of response actions on NPL and non-NPL sites. One attorney from the Attorney General's Office works 40% for HEER. HEER gets approximately 51% of its funding from Federal grants, 18% from the State General Fund, and 31% from the State Cleanup Fund.

CLEANUP ACTIVITIES

Remedial actions are currently underway at four NPL sites. The State's priority list is limited to sites where a formal cleanup agreement has been signed. In addition to the cleanup at the one listed site, the HEER Office is currently overseeing response actions at 25 non-NPL sites where there is no formal order or agreement. The majority of the State's sites have needed only removal actions and have been completed within one month. At non-NPL sites, four removals are currently underway, approximately ten were completed in FY95, and about 30 have been completed since the start of the program. Most of the 200 known and suspected sites are in the investigative stage.

CLEANUP FUNDING

The Environmental Response Revolving Fund had a balance of $3M at the end of the fiscal year (6/30/95). During FY95, $1.7M added to the fund and $500K were paid out for non-NPL sites. Also during FY95, $1.2M were obligated or encumbered for non-NPL sites. Taxes are a significant source of funding. Minor sources include appropriations, penalties, cost recoveries, interest, bonds, fees, private funds, and transfers. This fund may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, operations and maintenance, natural resource restoration, and program administration.

CLEANUP POLICIES AND CRITERIA

On 8/17/95, the HEER Office adopted regulations establishing risk management criteria and cleanup policies. Water quality criteria, MCLs/MCLGs, and background levels are used where appropriate. Standards for subsurface contamination are being established by a policy statement. The State also has a modeling process and has established standards for petroleum constituents. The State uses a risk range between 10^{-4} and 10^{-6}.

PUBLIC PARTICIPATION

Public participation is at the discretion of the Director if the cleanup is performed by a PRP. If the State is paying for the cleanup the regulations require establishing an Administrative Record, publishing a notice of availability of the Administrative Record in a newspaper, soliciting public comments on the proposed action, and public hearings. The Department of Health is required to develop a public education program for hazardous waste issues.

ENFORCEMENT

Liability

Liability is strict, joint and several, retroactive, and includes liability for natural resource damages. Civil penalties are available for $10K per day for failure to report a release and at least $50K-100K per 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.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The State has no formal voluntary or brownfields programs.

FEDERAL/STATE PARTNERSHIPS

For FY95, Hawaii has a CPCA, a SMOA, and SSCAs with U.S. EPA.

NEVADA

SITES

NPL Sites		State Sites	
Final:	1	Known and Suspected:	136
Proposed:	0	Identified as Needing Attention:	136
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 corrective action, and UST programs. The Bureau has a full-time staff of 24, with 10-12 FTEs devoted to RCRA and Superfund activities. The Attorney General's Office supplies two attorneys to the Division.

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 110-127 non-NPL sites. Since the start of the State's cleanup program, 340 remedial actions have been completed at non-NPL sites. Sixty eight remedial actions were completed at non-NPL sites during FY95.

CLEANUP FUNDING

The Hazardous Waste Management Fund had a balance of more than $1M at the end of the fiscal year (6/30/95). During FY95, approximately $500K were paid out from the fund for non-NPL sites. 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, natural resource restoration, and program administration.

CLEANUP POLICIES AND CRITERIA

The State has adopted regulations which establish standards for soil and groundwater contaminated by petroleum products. The Contaminated Soil and Groundwater 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

The Corrective Action Bureau strictly adheres to general 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 per day per violation are available. Punitive damages are not authorized.

Natural Resource Damages

Nevada does not have a natural resource damages program.

Property Transfer

Nevada does not have property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

The voluntary program is part of the standard cleanup program, and all PRPs are eligible to participate. Civil penalties will not be assessed against PRPs who participate.

The State has no brownfields program, but is considering developing one. It targets areas currently zoned for industrial use for cleanup.

FEDERAL/STATE PARTNERSHIPS

For FY95, Nevada has a CPCA, a SMOA, and SSCAs with U.S. EPA.

REGION X

Alaska
Idaho
Oregon
Washington

ALASKA

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	1347
Proposed:	0	Identified as Needing Attention:	1347
Deleted:	0	On Inventory or Priority List:	1347

STATUTORY AUTHORITIES

The *Oil and Hazardous Substance Releases Law,* Alaska Stats. §§46.08.005 to .900 (1986, as amended 1989, 1990, 1991, 1994, 1995), 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, as amended 1990, 1991, 1993, 1994), covers enforcement and other provisions.

The *Liability and Cost for Oil and Hazardous Substances Discharge Law,* Alaska Stats. §§46.03.822 *et seq.* (1972, as amended 1976, 1989, 1991, 1992), was used in response to the Exxon Valdez oil spill and provides for strict, joint and several liability.

The *Oil and Hazardous Substance Pollution Control Law,* Alaska Stats. 46.04 (1980, as amended 1982, 1986, 1989, 1990, 1991, 1992, 1993, 1994) provides additional authorities.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Conservation, Spill Prevention and Response Division, Contaminated Sites Remediation Program 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 (55%) and federal grants (45%). The Office of the Attorney General provides legal support with 2.5 FTE attorneys.

Spill emergency response is handled by the Division's Government Preparedness and Response Program.

CLEANUP ACTIVITIES

The State does not differentiate between remedial actions and removals. Currently, there are seven remedial actions underway at NPL sites and 1216 at non-NPL sites. At NPL sites, there were no remedial actions completed in the past fiscal year. Seventy-three remedial actions were completed at non-NPL sites in FY95. Since the start of the program, one remedial action has been completed at an NPL site. At non-NPL sites, 334 remedial actions have been completed since the start of the State's program.

A total of 35 activities at non-NPL sites were paid for by the State since the start of the program. Two hundred and ninety-nine were paid for by responsible parties.

CLEANUP FUNDING

Alaska's State cleanup fund is the Oil and Hazardous Waste Release Response Fund. This fund is composed of monies appropriated from a Surcharge Account that is funded by a $.05 per barrel tariff on crude oil. Monies appropriated to a Mitigation Account are further appropriated by the legislature to the Response Fund. Two accounts comprise the Response Fund: the Response Account, which had a balance of approximately $50M at the end of FY95, and the Prevention Account which had a balance of about $23M at the end of FY95. A total of $28.6M were added to the Response Fund in FY95, with $2.7M of this amount being appropriated from the Mitigation Account. $12.9M were paid out of the fund and $3.6M were obligated or encumbered during the course of FY95.

The Response Fund can be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA matches, grants to local government, and program administration.

CLEANUP POLICIES AND CRITERIA

The State uses MCLs/MCLGs, water quality criteria, EPA guidelines, risk assessment, background levels, groundwater and soil standards, and promulgated standards for cleanup of petroleum in soils in addressing contaminated sites. State guidelines provide for cleanup to background levels or for performing a leaching assessment that ensures the proposed cleanup standard will not affect groundwater. Risk levels of 10^{-5} are used for risk assessments.

PUBLIC PARTICIPATION

The Department attempts to involve the public depending on the seriousness of the site and on public interest. Public notice requirements, provisions for public comment, hearings and meetings, and document availability are all available on an *ad hoc* basis.

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 and joint and several. Civil penalties are $500 to $100K for first violations, and no more than $10K per day that a violation continues. Individuals are subject to criminal penalties of $10K per day, up to one year imprisonment, or both, for knowingly falsifying documents used for purposes of compliance monitoring.

Natural Resource Damages

The State does have authority independent of Federal law to recover for natural resource damages under AS 46.04.040 (5). Alaska's authority, however, is very broad, and

the only case that is currently pending is the Exxon Valdez Oil Spill. In most cases, settlements are reached.

Property Transfer

Alaska has no property transfer program.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Alaska is just beginning to develop a voluntary cleanup program as enabled by a core grant from the EPA brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Alaska has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

IDAHO

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	59
Proposed:	2	Identified as Needing Attention:	-
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 for 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 Support Services, 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, 20 FTE work primarily on Superfund. One attorney from the Attorney General's Office is assigned to handle cleanup cases for the DEQ. Program support is provided by Federal grants (80%), a State cleanup fund (5%) and monies collected from responsible parties (15%).

CLEANUP ACTIVITIES

At NPL sites, the State has three remedial actions underway. No remedial actions were completed in the past fiscal year (7/1/94-6/30/95), and seven remedial actions have been completed since the start of the program. At non-NPL sites, there are currrently no remedial actions underway. One remedial action at a non-NPL site was completed in the past fiscal year; four have been completed since the start of the program.

At NPL sites, one removal is currently underway. One removal was completed in the past fiscal year and eight have been completed since the start of the program.

A total of five remedial actions and removals were paid by PRPs since the start of the program, and the State has paid for no remedial actions or removals.

CLEANUP FUNDING

The Hazardous Waste Emergency Account is used to support emergency cleanup activities. The source of the funds are fees resulting from waste disposal at the Envirosafe

Hazardous Waste Landfill. The Account had a balance of $350,877 at the end of FY95. $78,238 were added during FY95, and $6,817 were paid out, all for work on non-NPL sites.

Idaho also has two funds to support remedial activites at the Bunker Hill Superfund Site. Both were established in 1995. The Governor's Office Fund has a balance of $1,925,000; $125K have been expended since July 1995. The Environmental Remediation Fund has a balance of $2.1M, with $250K having been spent since July 1995.

CLEANUP POLICIES AND CRITERIA

The State uses water quality criteria, MCLs/MCLGs, risk assessment, EPA guidelines, groundwater standards, and air toxic standards. The State uses risk-based standards and other EPA guidance as appropriate to select and apply cleanup criteria.

PUBLIC PARTICIPATION

Idaho has no formal program, but attempts to fulfill EPA guidelines. The State provides opportunity for public comment, hearings and meetings, and document availability through policy and *ad hoc* arrangements.

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 per day in civil penalties, but no punitive damages are available. The State has essentially no enforcement authorities under the HWMA.

Natural Resource Damages

Idaho has no authority independent of federal law to recover for NRDs. Under CERCLA, two NRDs have been recovered, one in 1985 for $5M and one in 1994 for work to meet performance standards and habitat restoration or replacement criteria. Using NRD monies recovered by the State, two actions are under way, two have been completed and $1.3M is being spent on these restorations.

Property Transfer

Idaho has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Idaho does not have a voluntary cleanup program. However, State and federal laws regulating hazardous waste releases provide the incentive for facility owners and operators to enter into consent orders with the State to cleanup sites.

Idaho does not have a brownfields program.

FEDERAL/STATE PARTNERSHIPS

For FY95, Idaho has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

OREGON

SITES

NPL Sites		State Sites	
Final:	11	Known and Suspected:	1559
Proposed:	1	Identified as Needing Attention:	218
Deleted:	1	On Inventory or Priority List:	124

STATUTORY AUTHORITIES

The *Environmental Cleanup Law*, Or. Rev. Stats. §§465.200-.420, 465.995 (1987, as amended 1989, 1991, 1995), 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). The 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." The amendments of 1995 require revision of risk protocols and consideration of a broader range of remedies, focusing on costs and benefits of competing protective remedies.

PROGRAM ORGANIZATION AND FUNDING

The Waste Management and Cleanup Division (WMCD) in the Department of Environmental Quality (DEQ) has a staff of 98 FTEs. One attorney from the Oregon Department of Justice, Attorney General's Office, handles litigation and advises the WMCD as requested.

Funding for staff and administrative costs is provided by the HSRAF (88%), Federal grants (3.5%), State General Fund (0.2%) and other fees (primarily petroleum transfer fees) and penalties (8.3%).

CLEANUP ACTIVITIES

At NPL sites, 11 remedial actions are currently underway and one was completed in the past fiscal year (7/94 - 6/95). Four remedial actions at NPL sites have been completed since the start of Oregon's program. At non-NPL sites, 198 remedial actions are currently underway and four were completed in FY95. Since the start of the program, 19 remedial actions have been completed at non-NPL sites.

There are two removals underway at NPL sites. Three removals have been completed since the start of the State program at NPL sites; none were completed in the last fiscal year. Thirty-four removals are underway at non-NPL sites. In the last fiscal year, nine removals were completed at non-NPL sites and 62 have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substance Remedial Action Fund (HSRAF) had balance of $4,932,000 at the end of 1995. Additions for the biennium accounting period, from 7/1/93 to 6/30/95 totalling $9,481,635 were made to the fund and a total of $11,804,385 were paid out during the last biennium. No additional funds were encumbered during the biennium. Cost recoveries and hazardous substance and solid waste tipping fees make up the significant source of the HSRAF, with additional revenue from interest and penalties. The fund may be used for emergency response, site investigations, removals, studies and design, remedial actions, O&M, program administration, grants to local government, and State CERCLA match.

The Orphan Site Account had a balance of $1,042,000 at the end of 1995. A total of $6,226,622 were added to the account during the biennium ending in June 1995. $5,757,648 were paid out of the account. The significant source of funds for the Orphan Site Account is bond authority, with minor sources of revenue coming from fees and interest. Authorized uses for the fund include site investigation, studies and design, removals, remedial actions, and operations and maintenance.

CLEANUP POLICIES AND CRITERIA

State regulations require cleanup to the "lowest feasible concentration." Cleanup must be protective and cost-effective. The State uses background levels, water quality, MCLs/MCLGs, risk assessment, EPA guidelines, and soil standards as cleanup levels. Oregon also uses feasibility studies to determine and evaluate alternate remedies. Risk levels of 10^{-6} are used for individual carcinogens.

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. 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.

The Oregon DEQ will be revising its cleanup standards by January 1997 as per HB 3352.

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 ten people. Public notice is provided for final remedial action. The laws also provides for document availability.

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. Civil penalties of up to $10K are available

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

Oregon does have authority independent of federal law to recover for natural resource damages under ORS 465.255. The State, however, has not sought many NRD recoveries. The Oregon Fish and Wildlife Service has been involved in some NRDs resulting from oil spills. Responsible parties are liable under State law for natural resource damages.

Property Transfer

Oregon does have authority for a property transfer program (ORS 465.255(c)); however, there is no active State government role. Sellers are required to disclose the presence of hazardous substance on the site before transfer.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Oregon does have a voluntary cleanup program, established by policy and guidance in 1991, that complements the orphan and enforcement program. Anyone wanting to move a cleanup forward is eligible to participate. The State will provide technical assistance and a "no further action letter" for participants. State participation in the program is funded by cost recovery. An hourly rate for staff oversight is charged.

In addition, the State has a brownfields program established by policy through voluntary cleanup, prospective purchaser and other provisions of HB 3352, and an EPA-funded local brownfields pilot program. The program lacks specific criteria for site inclusion other than commercial/industrial properties that will be redeveloped after cleanup. Thus far, over 100 sites are in the program and cleanup is currently underway at 112 of the sites (including RI/FS phase.)

FEDERAL/STATE PARTNERSHIPS

For FY95, Oregon has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

WASHINGTON

SITES

NPL Sites		State Sites	
Final:	56	Known and Suspected:	1364
Proposed:	0	Identified as Needing Attention:	932
Deleted:	4	On Inventory or Priority List:	507

STATUTORY AUTHORITIES

The *Model Toxics Control Act*, Wash. Rev. Code Ch. 70.105D (1988, as amended 1993, 1994), authorizes funding for two accounts, provides enforcement authorities, establishes a priority list, and provides for citizen suits, replacement water supplies, and public participation procedures. The amendments of 1993 and 1994 relate to private right of actions, permit exemptions, lender liability, use of agreed orders, the definition of industrial properties, and prospective purchaser agreements.

PROGRAM ORGANIZATION AND FUNDING

The Department of Ecology, Waste Management Division, includes the Toxics Cleanup Program which has 145 FTE staff members, 35 of which are federally funded. The remaining 110 FTEs are supported by the State Toxic Control Account. The Attorney General's office, handling settlements, has approximately 3.5 FTEs working on cleanups. Staff and administrative costs are funded by federal grants (24%), a State cleanup fund (65%), and by State UST fees (11%).

CLEANUP ACTIVITIES

Remedial actions are currently underway at 96 NPL sites and 132 non-NPL sites. In the past fiscal year, five remedial actions were completed at NPL sites and four at non-NPL sites. At NPL sites, 24 remedial actions have been completed since the start of the program. Ninety non-NPL remedial actions have been completed since the start of the program.

There are 11 removals underway at NPL sites and 31 at non-NPL sites. In FY95, nine NPL removals and eight non-NPL removals were completed. Since the start of the State program, removals have been completed at 20 NPL sites and 69 non-NPL sites. A total of 29 remedial actions and removals at non-NPL sites were paid for out of State funds; 262 were financed by responsible parties.

CLEANUP FUNDING

The Department administers two accounts: (1) the State Toxics Control Account and (2) the Local Toxics Control Account.

The balance in the State account was $2,375,673 at the end of the fiscal year (6/30/95). The State account received $25,811,359 in FY95. A total of $25.7M was paid out during FY95,

all to non-NPL sites. The State account is funded primarily from taxes. Cost recoveries, fees, interest and penalties also contribute to the fund. The State account can be used for site investigation, emergency response, removals, studies and design, remedial actions, natural resource restoration, O&M, State CERCLA match, and program administration. The State account funds related activities in other agencies in addition to various divisions within the Department of 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 Toxics Control Account balance at the end of FY95 was $26,161,300 and $20,730,515 was added to the account in FY95. A total of $29,158,688 was paid out during FY95: $11,731,296 to NPL activities, $17,427,392 to non-NPL activities. In total, $16,916,436 was obligated or encumbered during FY95: $14,692,008 to NPL sites and $2,226,428 to non-NPL activities.

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, soil and groundwater levels, EPA guidelines, Practical Quantitative Limit levels, and standard State formulas for risk assessment. Risk levels of 10^{-5} for total carcinogens, 10^{-6} for residential carcinogens, and 10^{-6} for industrial 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 per 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

Since 1990, RCW 70.105D.040(2) authorizes the State to collect natural resource damages. The Department of Ecology is the designated natural resources trustee and has one FTE assigned to pursuing NRDs under CERCLA/SARA authority. The State has collected approximately $45M as a joint trustee with the Federal trustees and tribes in four settlements. Three claims are pending. Currently, there are five natural resource restorations underway and three have been completed thus far. A total of $25M has been spent on restorations.

Property Transfer

The State has no property transfer provisions.

VOLUNTARY AND BROWNFIELDS PROGRAMS

Washington does have a voluntary cleanup program, established in 1993 by regulation (WAC 173,340,550 (7)). Any PRP who submits a cleanup report with a fee is eligible. Participants receive a timely review of cleanup report and written determination. State participation in the program is funded by fees paid by the participants. The State charges a fee of 2% of cleanup costs. Costs of voluntary cleanups are $54K on average.

Washington does not have a brownfields program; however, the State is targeting brownfields through independent cleanups, prospective purchaser agreements, and prepayment agreements.

FEDERAL/STATE PARTNERSHIPS

For FY95, Washington has a CPCA, a SMOA, and SSCAs with the U.S. EPA.

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