

# Chapter 4

## Enforcement Progress

The Superfund enforcement program uses the enforcement provisions of CERCLA, as amended by SARA, to maximize the involvement of potentially responsible parties (PRPs) in the cleanup of Superfund sites. The Agency's enforcement goals are to:

- Maintain high levels of PRP participation in conducting and financing cleanup through use of EPA's statutory authority;
- Ensure fairness and equity in the enforcement process; and,
- Recover Superfund monies expended by EPA for response actions.

FY96 accomplishments illustrate the continuing success of EPA's Superfund enforcement efforts. EPA achieved enforcement agreements worth over \$888 million in PRP response work. PRPs financed approximately 73 percent of the remedial designs (RD) and 71 percent of the remedial actions (RA) started during the fiscal year. Through its cost recovery efforts, EPA achieved \$451 million in settlements and collected more than \$252 million for reimbursement of Superfund expenditures.

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### 4.1 The Enforcement Process

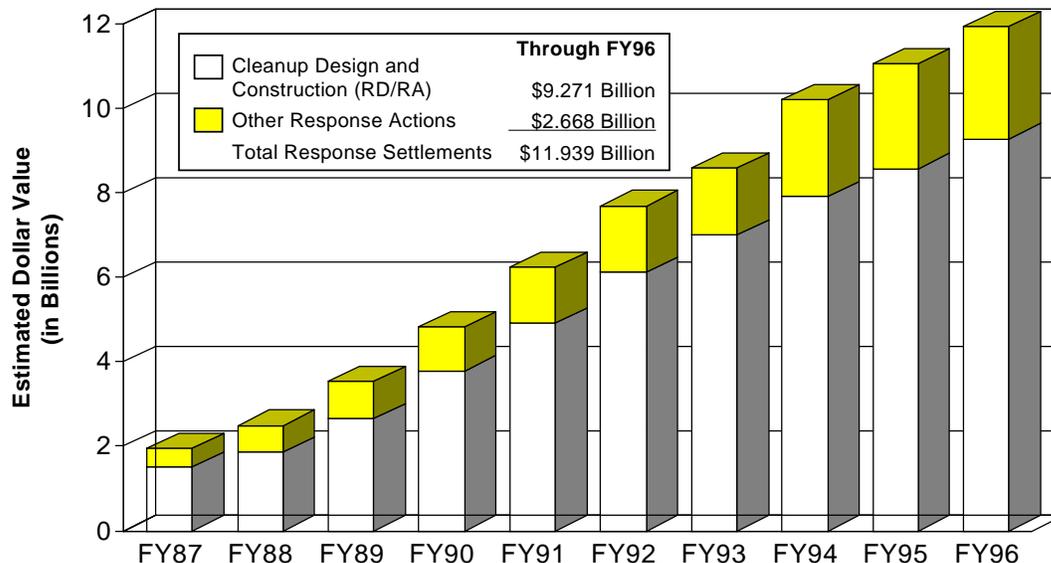
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The Superfund program integrates enforcement and response activities. To initiate the enforcement process, EPA identifies PRPs, notifies them of their potential liability, and seeks to negotiate an agreement with them to perform or pay for cleanup. If agreement is reached, the Agency oversees the work performed under the legal settlement. If the PRPs do not settle, EPA may issue a unilateral

administrative order (UAO) compelling them to perform the work. If PRPs do not comply with the UAO, EPA may conduct the cleanup itself using Superfund monies and later pursue a cost recovery action against the PRPs. These steps are fundamental for obtaining PRP involvement in conducting response activities and recovering expended Trust Fund monies. The Superfund enforcement process is explained in more detail below.

- When a site is being proposed for the National Priorities List (NPL), or when a removal action is required, EPA conducts a PRP search to identify parties who may be liable for site cleanup and collect evidence of their liability. PRPs include present and past owners or operators of the site, generators of waste disposed of at the site, and transporters who selected the site for the disposal of hazardous wastes.
- EPA notifies parties of their potential liability for future cleanup work and any past response costs incurred by the government, thus beginning the negotiation process between the Agency and the PRPs.
- EPA encourages PRPs to settle with the Agency and undertake cleanup activities, specifically to start removal actions, remedial investigation/feasibility studies (RI/FSs), or remedial design/remedial action (RD/RA). If PRPs are willing and capable of doing the response work, the Agency will attempt to negotiate an agreement allowing the PRPs to conduct and finance the proposed work and reimburse past government costs. For RD/RA, the settlement must be in the

**Exhibit 4.2-1  
Cumulative Value of Response Settlements  
Reached With Potentially Responsible Parties**



Source: CERCLIS.

form of a judicial consent decree (CD) that is lodged with a court by the Department of Justice (DOJ). For other types of response actions, the agreement may be in the form of a CD or an administrative order on consent (AOC) issued and signed by the EPA Regional Administrator. Both agreements are enforceable in a court of law. Under either agreement, PRPs conduct the response work under EPA oversight. PRPs who settle may later seek contribution toward the cost of the cleanup from non-settling PRPs by bringing suit against them.

- If negotiations do not result in a settlement, CERCLA Section 106 provides EPA with the authority to issue a UAO requiring the PRPs to conduct the cleanup; EPA may also bring suit through DOJ to compel PRPs to perform the work. If the Agency issues a UAO and the PRPs do not comply, the Agency again has the option of filing a lawsuit to compel the performance specified in the order or to perform the work itself and then seek cost recovery and treble

damages. Where the PRP notifies EPA in writing of its intent to comply with a UAO, EPA classifies the UAO as a settlement. Although UAOs in compliance are technically not legal settlements, they are counted as such programmatically because they result in PRPs performing response work.

- If a site is cleaned up using Superfund monies, DOJ will file suit on behalf of EPA, when practicable, to recover monies spent. Many of these suits to recover past costs will also include EPA claims for estimated future costs. Any sums recovered from the PRPs are returned to the Trust Fund.

#### 4.2 Fiscal Year 1996 Superfund Enforcement Progress

FY96 progress reflects the continuing success of Superfund enforcement efforts in securing PRP participation in Superfund cleanup and recovering

Trust Fund monies expended by EPA in its response efforts.

**4.2.1 Settlements for Response Activities**

During FY96, the Agency reached 154 settlements (CDS, AOCs, CAs, or UAOs in compliance) with PRPs for response activities worth over \$888 million. As shown in Exhibit 4.2-1, the cumulative value of PRP response settlements achieved under the Superfund program is almost \$12 billion.

Of the 154 settlements achieved in FY96, 68 settlements worth over \$700 million were for RD/RA. These RD/RA settlements included 39 CDS referred to DOJ for work estimated at \$487 million, 9 AOCs and 1 consent agreement for approximately \$17 million, and 19 UAOs in compliance for \$196 million. These RD/RA settlements include 42 RD/RA negotiations started and 64 RD/RA negotiations completed by EPA during the fiscal year.

During FY96, the Agency issued 70 UAOs. The Agency also signed 111 AOCs. The UAOs issued and the AOCs signed include agreements for removal actions, RI/FSs, RD, and RD/RA.

**4.2.2 PRP Participation in Cleanup Activities**

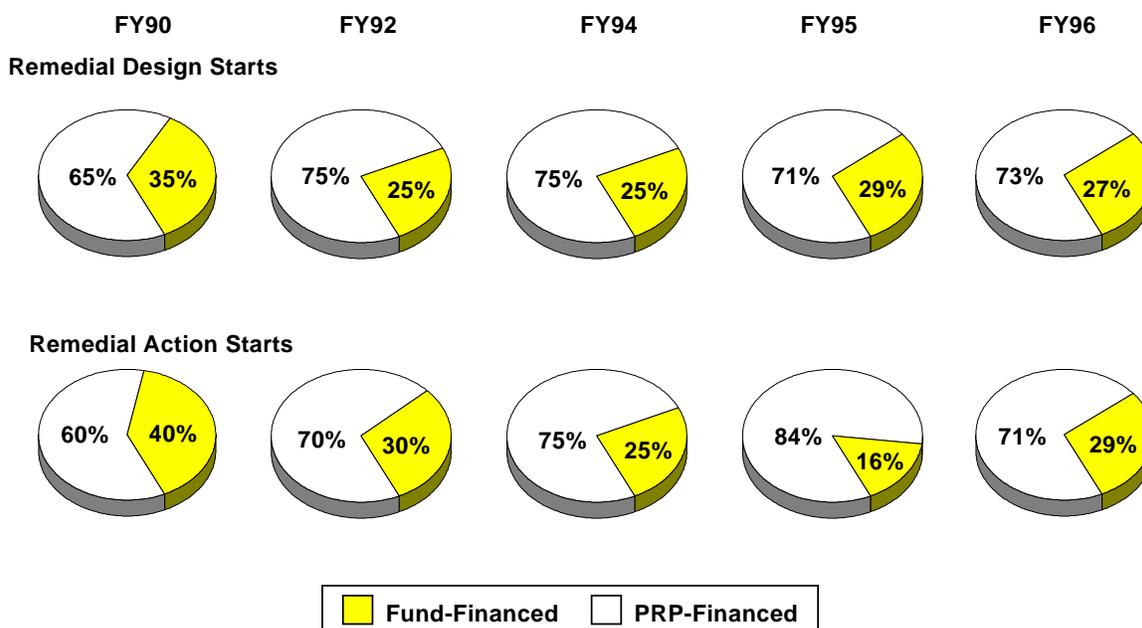
Exhibit 4.2-2 illustrates the continuing high level of PRP participation in undertaking and financing RDs and RAs since the implementation of the "Enforcement First" initiative in 1989.

In FY96, PRPs continued to finance and conduct a high percentage of the remedial work undertaken at Superfund sites: 73 percent of new RDs, 71 percent of new RAs, and 28 percent of new RI/FSs.

**4.2.3 Cost Recovery Achievements**

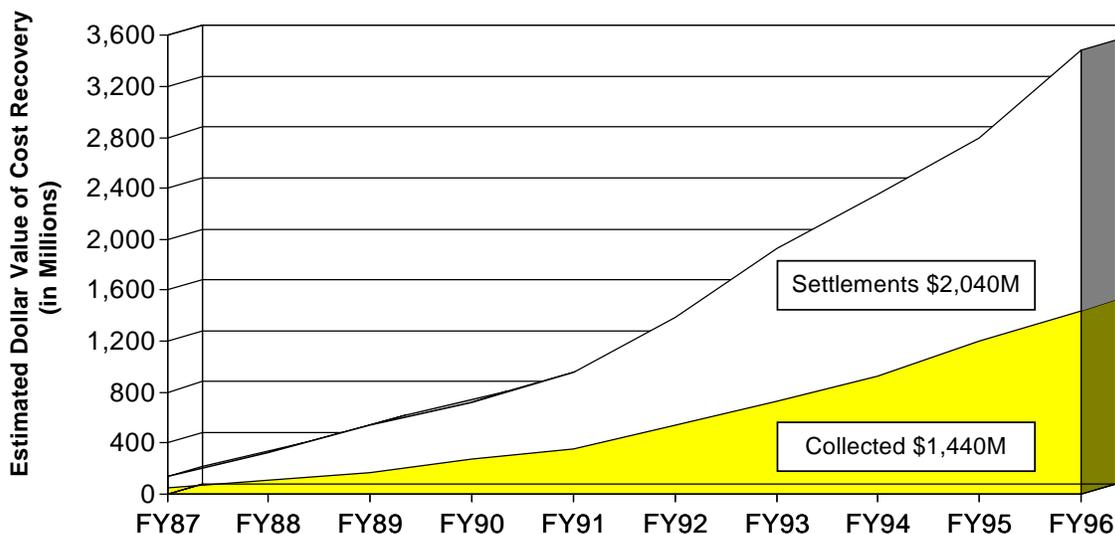
EPA and DOJ reached 220 cost recovery settlements worth more than \$451 million. These included 181 CERCLA Section 106/107 or Section

**Exhibit 4.2-2  
Percentage of Remedial Designs  
and Remedial Actions Started by PRPs**



Source: CERCLIS. October 24, 1996.

**Exhibit 4.2-3  
Cumulative Value of Cost Recovery Dollars Collected and Settlements**



Source: CERCLIS.

107-only cost recovery actions each valued at \$200,000 or more. FY96 cost recovery actions represent 22 percent of the \$2.04 billion achieved in cost recovery settlements since the inception of Superfund. More than 50 percent of the total \$2.04 billion has been achieved in the last five years. Exhibit 4.2-3 illustrates cost recovery settlements achieved and collected to date.

EPA collected over \$252 million from cost recovery settlements, bankruptcy settlements, and other sources during the fiscal year. This sum is more than 17 percent of the approximately \$1.44 billion in past costs collected by EPA to date; approximately 75 percent of the \$1.44 billion has been collected in the past five years.

### 4.3 Enforcement Initiatives

During FY96, EPA continued to build upon prior Administrative Reform successes; it also introduced a new round of reforms targeted at

making Superfund a fairer program and further reducing transaction costs.

**Fairness.** Continuing to ensure fairness in enforcement was the primary objective of the reforms and activities undertaken in FY96. While EPA’s Office of Site Remediation Enforcement (OSRE) introduced a number of new initiatives, it continued to implement, evaluate, and learn from Administrative Reforms that were initiated in prior fiscal years. First, EPA continued to rely heavily on Alternative Dispute Resolution (ADR) to arrive at quicker, fairer, and more cost-effective settlements. Second, EPA issued the “Revised Guidance on CERCLA Settlements with De Micromis Waste Contributors,” designed to discourage third party contribution litigation against contributors of extremely small volumes of waste and, where necessary, improve EPA’s ability to resolve their liability concerns quickly and fairly. Third, in response to criticism that EPA routinely issued cleanup orders under Section 106 (Unilateral

Administrative Orders or UAOs) to only a subset of possible parties, the Agency committed to issuing such UAOs to the largest manageable number of PRPs. Fourth, EPA published the "Interim Guidance on Orphan Share Compensation for Settlers of Remedial Design/Remedial Action and Non-Time-Critical Removals," which established the amount of orphan share compensation that the Regions may offer to settling parties. Finally, EPA continued to promote redevelopment of contaminated properties by shielding some purchasers from Superfund liability.

**Reducing Transaction Costs.** During FY96, EPA continued to focus on identifying and implementing procedures for reducing the time and costs associated with Superfund enforcement. First, EPA issued "Reducing Federal Oversight at Superfund Sites with Cooperative and Capable Parties," which established guidelines for identifying high-quality PRP site remediation that qualifies for reduced federal oversight. Second, EPA made significant progress with respect to applying the interest earned on site-specific accounts to the remediation of a site.

These enforcement initiatives are described in more detail below. Highlights of successful enforcement accomplishments are given at the end of the chapter in Exhibit 4.3-1.

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#### **4.3.1 Continued Use of Alternative Dispute Resolution**

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FY96 was an outstanding year for the use of ADR in the Superfund program. Significant strides were made in every aspect of the ADR Program, including case use, case support systems, training, provision of ADR services, and outreach to the regulated community.

##### **Case Development**

During FY96, regional offices supported PRP allocation settlement efforts at over 30 sites by encouraging and/or providing ADR services in coordination with OSRE. Regional support for the use of ADR grew substantially, with all regional offices using or supporting PRP use of ADR to assist settlement efforts. Awareness of ADR as a tool for

increasing the efficiency of future disputes also increased during FY96, with mediation included in the dispute resolution provisions of several judicial and administrative settlement documents.

Region I used ADR in fully 13 cases during FY96. Of these, seven used ADR as an essential enforcement tool, three used ADR in consensus building, two used ADR in convenings (i.e., use of a neutral to bring parties together to consider using ADR, select a neutral and/or design an ADR process), and one case used ADR in conjunction with a precedential ADR provision in a Consent Decree. Region IV also enjoyed considerable success with ADR techniques. Among these was the use of ADR at the Aberdeen Dump Site in North Carolina, which resulted in an agreement among PRPs for allocation of past costs and future work totaling an estimated \$44.7 million.

##### **ADR Training**

Training in the effective use of mediation and other ADR techniques was provided to all regional offices during FY96. This intensive one-day training is designed for legal and program staff who participate in settlement activities. The ADR Users Training, taught jointly by EPA ADR staff and ADR professionals who have served as mediators in Superfund cases, concentrates on the inherent difficulties in Agency negotiations and how use of ADR can facilitate prompt resolution of such disputes.

A five-day advanced training, Mediating Environmental and Public Policy Disputes, was also given to ADR Specialists and Regional Judicial Officers in Boulder, Colorado. The training included advanced mediation skills training as well as principles and process training in convening complex multi-party mediations.

##### **Institutionalization of ADR**

During FY96, the national network of regional and Headquarters ADR specialists continued their efforts to implement the Agency's ADR Guidance requirement for routine consideration and appropriate use of ADR standard operating procedure in all enforcement and site-related disputes. The members

of the ADR Specialists Network, comprised of experienced ADR staff from each Region and Headquarters, serve as consultants to Agency and DOJ staff on the effective use of ADR in enforcement actions. The ADR Specialists Network held monthly conference calls to exchange information and coordinate ADR program efforts.

Senior staff to the Agency's Dispute Resolution Specialist provide consultation and design services to several offices of the Agency. In cooperation with the Federal Mediation and Conciliation Service, these individuals continue the Agency's efforts to foster the use of ADR in all Federal disputes, consistent with the Alternative Dispute Resolution (ADR) Act of 1996 and the National Performance Review (NPR).

### **Outreach Efforts**

Substantial progress has also been made to educate the regulated community about the Agency's support for the use of ADR and the potential for use of ADR techniques to reduce private and government transaction costs. As part of this effort, members of the ADR Specialists Network have made presentations and provided consultation services on effective ADR use for numerous professional and PRP organizations, including the American Bar Association (ABA), the Center for Public Resources (CPR), the Information Network for Superfund Settlements (INSS), the Society of Professionals in Dispute Resolution (SPIDR), and several Federal and state agencies.

### **Provision of Neutral Services**

Pursuant to confidentiality agreements between regional offices and site PRPs, the ADR Liaison continues to serve as a neutral convener, assisting PRPs in the design of ADR procedures and the selection of allocation professionals.

### **Superfund Administrative Reform Initiatives**

Members of the ADR Specialists Network assisted Agency efforts to implement several of the Superfund Administrative Reform Initiatives. The ADR Implementation Initiative involves several activities designed to further implementation of the

ADR Act, and the Agency's ADR Guidance. This highly successful effort, which required coordination across Headquarters and regional Superfund offices, resulted in the establishment of an ADR Implementation Plan in each Region. In addition, several Network members continue to assist in the development of the Allocation Pilot, which involves the design and implementation of a comprehensive program to test the use of an ADR-based cost allocation method modeled after the Superfund Reform Act of 1994, HR 4916, 103<sup>rd</sup> Congress, 2<sup>nd</sup> session.

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### **4.3.2 Revised "De Micromis" Guidance**

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In June 1996, EPA issued its "Revised Guidance on CERCLA Settlements with De Micromis Waste Contributors," modifying and superseding its 1993 guidance on "de micromis" settlements. The revised policy and associated model settlement documents are designed to discourage third party contribution litigation against contributors of extremely small volumes of waste ("de micromis parties") and, where necessary, improve EPA's ability to resolve their liability concerns quickly and fairly.

The revised guidance makes three important changes to the 1993 "de micromis" policy. First, it doubles the volumetric cut-off level that the 1993 policy established for "de micromis" eligibility. This will significantly increase the number of parties who can be protected under the "de micromis" designation. Second, consistent with EPA's policy that "de micromis" parties should not participate in financing site cleanups, it recommends that "de micromis" settlements be effected without any exchange of money. The 1993 guidance, in contrast, instructed the Regions to determine "de micromis" settlement payments using a method that considers individual volumetric contribution and total site costs. Third, it clarifies that "de micromis" settlements should only be considered when the Region finds that minuscule contributors are being pursued by other PRPs at a site.

In addition to the guidance memorandum, the revised guidance includes supplemental materials intended to establish routine "de micromis" settlement practices, thereby increasing the speed and

efficiency of the “de micromis” settlement process. These materials are identified below:

- Brochure that provides introductory information for potential settlers about the Superfund program and “de micromis” settlements;
- Sample cover letter to be used with the “de micromis” questionnaire;
- Questionnaire that asks potential “de micromis” parties about their waste contribution and involvement with the site, which EPA uses to determine eligibility for “de micromis” settlements;
- Sample cover letter that accompanies the “de micromis” settlement when it is sent out for signature by the settling party;
- “De micromis” administrative order on consent (AOC) that provides model settlement language for administrative resolution of a *de micromis* party’s liability;
- “De micromis” consent decree (CD), that provides model settlement language for judicial resolution of a “de micromis” party’s liability;
- Model Federal Registrar notice for use by EPA when providing the notice and comment required by section 122(I) of CERCLA.

In FY96, EPA succeeded in reducing Superfund liability for “de micromis” parties. Consistent with the FY95 model consent decree for the finance and performance of RD/RAs, EPA increased the number of settlements in FY96 that included agreements by settling parties to waive their rights to pursue “de micromis” parties for further contribution. Furthermore, where “de micromis” parties were pursued for contribution, EPA routinely attempted to protect the smallest volume contributors from Superfund liability. For example, at the Keystone Sanitation Landfill in Pennsylvania, EPA entered into settlements with approximately 167 third and fourth party defendants whose “de micromis” status protected them from future contribution suits.

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#### **4.3.3 Equitable Issuance of Unilateral Administrative Orders**

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It has long been EPA’s policy to issue Section 106 unilateral administrative orders (UAOs) to the largest manageable number of parties, after taking into account the adequacy of evidence of liability, financial viability, and waste contribution. Concerns have been raised, however, that EPA is failing to issue UAOs to all parties who have been identified as viable and viable. To address this concern and to ensure that UAOs are implemented fairly and equitably, EPA issued a supplemental policy memorandum, “Documentation of Reason(s) for Not Issuing CERCLA Section 106 UAOs to All Identified PRPs,” on August 2, 1996. The memorandum does not substantively change current UAO policy; rather, it clarifies the criteria for UAO party selection and requires documentation of decisions not to pursue parties, including parties who are identified after a UAO has been issued.

EPA actions at the Green River Disposal Site in Maceo, Kentucky demonstrate the Agency’s commitment to selecting UAO parties in a fair and equitable manner. Several years ago, Region IV issued a UAO requiring four PRPs to perform an RI/FS and removal actions at the site. In FY96, the Region issued another UAO directing these same PRPs and six additional PRPs to undertake design and implementation of the remedial action. The Region considered including several other PRPs in the second UAO, but decided against it due to insufficient evidence of liability or financial viability concerns. Consistent with the new reform, the Region documented specific reasons why these parties were excluded from the UAO.

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#### **4.3.4 Orphan Share Compensation**

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Under CERCLA’s joint and several liability scheme, viable PRPs are required to assume the liability share of insolvent or defunct parties who are unable to pay the costs of cleanup (i.e., the orphan share). In an effort to mitigate this effect and encourage PRPs to settle, EPA announced in October 1995 that it would compensate parties conducting cleanup actions for a limited portion of the orphan share in future cleanup settlements. The Agency

intended to compensate parties through forgiveness of past costs and projected oversight costs.

Soon after the announcement, however, sources of revenue for the Superfund program were suspended—Superfund’s taxing authority expired and was not reinstated and Congress did not provide EPA with a separate appropriation for orphan share compensation. Committed to implementing this reform, the Agency examined alternative means of orphan share compensation. The result of this effort was the “Interim Guidance on Orphan Share Compensation for Settlers of Remedial Design/Remedial Action and Non-Time-Critical Removals,” which was issued on June 3, 1996.

The guidance establishes the amount of orphan share compensation that the Regions may offer to viable parties. This amount is not to exceed 25 percent of the estimated cost of a cleanup action at a site. EPA believes that such a limitation strikes a glance between preserving the Trust Fund and providing parties with meaningful relief by minimizing transaction costs and delays in cleanup negotiations associated with calculation and allocation of the orphan share.

The guidance instructs Regions to offer compensation only where the following conditions have been met: 1) EPA initiates or is engaged in ongoing negotiations for an RD/RA at a site or for a non-time-critical (NTC) removal at a National Priorities List (NPL) site; 2) a PRP or group of PRPs agrees to conduct the RD/RA pursuant to a consent decree or the NTC removal pursuant to an administrative order on consent; and 3) an orphan share exists.

To assist the Regions in determining the appropriate orphan share component of a federal compromise (i.e., forgiveness of past costs), EPA and the Department of Justice established an orphan share assistance team. The team worked closely with Regional staff to resolve issues on a site-by-site basis and to ensure consistent application of the reform.

In FY96, EPA offered to compromise orphan shares worth over \$57 million to parties who agreed to conduct cleanups at 24 Superfund sites. This achievement fulfilled Administrator Browner’s

commitment to compensate parties for over \$50 million in costs associated with orphan shares. The initiative has proven effective in expediting the settlement process by reducing the conflict over who should pay for the orphan share.

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#### **4.3.5 Prospective Purchaser Agreements**

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In FY96, EPA continued to promote redevelopment of contaminated properties by protecting prospective purchasers, lenders, and property owners from Superfund liability. EPA’s May 1995 *Guidance on Agreements with Prospective Purchasers of Contaminated Property* is helping to stimulate the development of contaminated sites where parties, particularly developers, have been reluctant to take action. Under this guidance, EPA issues agreements known as “prospective purchaser agreements” (PPAs), which provide assurances that prospective purchasers of contaminated properties will not be held responsible for cleanup costs when they did not contribute to or worsen the contamination. Of the 45 agreements to date, more than half have been reached since the guidance was issued in FY95.

Region VII recently finalized two prospective purchaser agreements. One agreement involves a parcel of land located at the Jasper County Site (a.k.a., the Oronogo-Duenweg Mining Belt NPL site), a large mining site in southwest Missouri, that is contaminated with mining waste. The prospective purchaser agreed to perform work to reduce potential exposure to mining wastes, including grading the site, leveling piles of mining wastes, filling open mine shafts with rock, and fencing the site to prevent public access. The purchaser plans to use the property for operation of a metal recycling facility.

A second agreement involves the Kansas City Structural Steel Site in Kansas City, Kansas. The purchaser is a neighborhood organization working with disadvantaged Latino and Hispanic community members, who will use the property for light industrial purposes. The current plan is to construct a self-storage complex on the property. Consideration received by EPA includes institutional controls concerning use of the property, and implementation of operation and maintenance requirements.

#### **4.3.6 Reducing Federal Oversight at Sites with Cooperative and Capable Parties**

As the Superfund program has matured, parties have developed substantial expertise in performing cleanup activities. Many of these parties perform high quality cleanups and work closely and cooperatively with EPA. To encourage and reward such actions, EPA issued a policy memorandum on July 31, 1996 entitled "Reducing Federal Oversight at Superfund Sites with Cooperative and Capable Parties." The memorandum sets guidelines for determining PRP cooperativeness and capability. If these guidelines are met, EPA may reduce federal oversight of remedial and non-time-critical removal actions performed by PRPs at Superfund and non-Superfund sites. Regions are instructed to reduce such oversight costs wherever practicable.

While the guidance provides site managers with examples of opportunities for reducing oversight costs, it is careful to point out that not all circumstances may warrant a reduced federal oversight role (e.g., highly complex sites). Furthermore, managers are instructed to estimate, document, and measure reductions in oversight activities and costs.

Regions identified approximately 100 sites with cooperative and capable parties and have either already reduced or plan to reduce oversight activities. Cost savings are already being realized. EPA may also explore opportunities to involve communities in determining the appropriate level of PRP oversight.

#### **4.3.7 Site Specific Special Accounts**

CERCLA provides EPA with the authority to retain and use funds for future cleanup work that were received as a result of settlements with PRPs. EPA has used this authority to create special accounts at individual sites. Prior to FY96, however, interest earned on settlement funds could not be credited to these accounts. This changed in FY96 when EPA reached an agreement with the Office of Management and Budget (OMB) and the Department of Treasury that interest can accrue directly to special accounts. This agreement will benefit parties who enter into settlements with EPA at Superfund sites because settlement payments designated for future

work will now both earn and retain interest. The 1996 events that led to the establishment of interest bearing special accounts are listed below.

- In March 1996, EPA issued a memorandum encouraging Regional offices to place settlement funds in special accounts and detailed the process and utility of establishing these accounts;
- In June 1996, EPA reached an agreement with OMB and the Department of Treasury that interest can accrue to special accounts. The Agency can now use interest from the accounts to carry out the terms of its settlement agreements;
- In October 1996, OMB approved EPA's methodology for calculating interest rates for the accounts. EPA then sent a memorandum to the Regions outlining the agreement with OMB, listing principal and interest balances for special accounts, and describing the procedures for requesting these funds.

In FY96, Regions established 23 special accounts with an aggregate balance of \$78 million. As of the end of FY96, EPA had opened a total of 59 accounts with an aggregate balance of \$261 million (\$226 million in principal and \$35 million in interest through August 1996). The following examples illustrate the success of this reform in making site-specific special accounts available for response actions at Superfund sites:

- **Love Canal Superfund site in New York.** Five million dollars in special account funds is being applied toward the remaining work at the site, which entails revitalizing the site and completing a health register.
- **Oronogo-Duenweg Superfund site in Missouri.** EPA entered into a \$1 million settlement with a PRP who had limited resources. EPA used funds from a special account to expedite the settlement process with the PRP.
- **Sharon Steel and Midvale Slag Superfund sites in Utah.** EPA has established a special account for the two contiguous sites worth \$65

million. While most of these funds have already been used to clean up the sites, \$11 million in interest recently credited to the account will be used to pay for future cleanup activities.

- **San Fernando Valley-North Hollywood Superfund site in California.** Five PRPs contributed to a special account that EPA plans to use to pay for the operating costs of the site's groundwater treatment system.

**Exhibit 4.3-1  
Highlights of Successful Enforcement Accomplishments**

<p><b>Central Landfill</b> Rhode Island (Region 1)</p> <p>Settlement: Consent Decree (CD01) for RA and cost recovery for RI/FS, and its appropriate RD lodged on 7/16/96 at the Federal District Court for the District of Rhode Island and entered on 10/2/96.</p> <p>Estimated Value:     \$32,000,000</p>	<p>EPA reached a Consent Decree with a major PRP to perform remedial activities at the Central Landfill site in Johnston, Rhode Island. The Consent Decree was lodged in the Federal District Court for the District of Rhode Island on July 16, 1996. Remedial action costs are estimated at \$32,000,000.</p> <p>Wastes that contaminated and affected nearby aquifers, wells, surface waters, bedrock trenches, and wetlands included latex wastes, acid wastes, and solvents containing various VOCs and heavy metals. The owner of the landfill entered into a Consent Order with EPA in 1987 to conduct a study of the level of contamination at the site. Once the contaminants were identified in the summer of 1994, a Record of Decision (ROD) was issued by EPA and cleanup remedies were selected: capping the landfill, extracting and treating the contaminated groundwater in the most contaminated ½ acre of the site, conducting a detailed study of the landfill gas combustion system that was installed as an initial remedy, as well as maintaining public water supply lines. These remedies have significantly reduced health risks to the public while studies are being completed and final remedies are being planned.</p>
<p><b>Carroll &amp; Dubies Sewage Disp.</b> New York (Region 2)</p> <p>Settlement: UAO (UAO01) for RD/RA issued on 9/29/95; notice of intent to comply given on 10/30/95.</p> <p>Estimated Value:     \$8,500,000</p>	<p>On September 29, 1995, EPA issued a Unilateral Administrative Order (UAO01) requiring the implementation of remedies to source areas on the Carroll &amp; Dubies Sewage Disposal Site in Port Jervis, New York. On October 30, 1995, the PRPs gave notice of intent to comply. The site was once used for disposal of numerous wastes, including septic and cosmetic wastes. Wastes accepted at the site were placed into unlined lagoons and trenches. Contamination studies for seven lagoons, groundwater, and nearby soils were performed in 1992 and 1993. Separate RODs regarding the use of remedial actions were signed by the EPA in 1995 (Operable Unit 1), and September 1996 (Operable Unit 2), based on results of the studies.</p> <p>Groundwater and nearby soils were contaminated with VOCs and heavy metals, and the lagoon liquids were contaminated with VOCs, heavy metals, and phthalates, a plastic byproduct. The first remedy (OU1) addressed the actual source areas (surrounding lagoons and impacted soils) at the site and the actions that needed to be taken to ensure that source areas would pose no threat to human life and no further threat to groundwater. The second remedy (OU2), whose investigation is currently underway, will address removal and control of contaminated groundwater beneath the site. The two PRPs who performed the RI/FS for OU1 are currently conducting the RI/FS for OU2.</p>

<p><b>Waste, Inc. Landfill</b> Indiana (Region 5)</p> <p>Settlement: UAO (UAO01) for RD/RA in Operable Unit 1 (OU1) on 12/8/95. Notice of Intent to comply given on 1/8/96.</p> <p>Estimated Value:     \$16,000,000</p>	<p>On December 8, 1995, a UAO was issued by EPA for cleanup of the Waste, Inc. Landfill site in Michigan City, Indiana. Notice of intent to comply was given on January 8, 1996. RD/RA activities worth an estimated \$16,000,000 will address the contaminated area. The 32-acre site was once used as a permitted landfill. However, in the early 1970's, the landfill began accepting unapproved materials. The site was closed in 1983. Preliminary assessment and site screening inspections revealed that the soil and groundwater were contaminated with VOCs, PCBs, phthalates, and other organic substances, while sediments from a nearby stream yielded high levels of heavy metals, in addition to other organic compounds.</p> <p>In 1994, the EPA issued a ROD (OU1) that called for an eight-step plan to remediate the site, with an emphasis on control and treatment of groundwater. Steps included the installation of a RCRA Subtitle D cap, the collection of contaminated leachate, and the installation and operation of groundwater wells on site.</p>
<p><b>Sherwood Medical Co.</b> Nebraska (Region 7)</p> <p>Settlement: Consent Decree for RD/RA at Operable Unit 1, RD/RA at Operable Unit 2, and cost recovery for oversight at Operable Units 1 &amp; 2 lodged on 8/30/96 in the District of Nebraska Federal District Court.</p> <p>Estimated Value:     \$6,833,135</p>	<p>EPA reached a Consent Decree with PRPs for remedial design and remedial action at Operable Units 1 and 2 on the Sherwood Medical Company site in Madison County, Norfolk, Nebraska, worth an estimated \$6,833,135. The Consent Decree was lodged in the District of Nebraska Federal District Court on August 30, 1996. The selected remedy addresses the VOC contamination found in the groundwater and the soil. Contaminants identified in the groundwater include TCE, PCE, and DCE.</p> <p>EPA issued a prior ROD that called for the excavation of contaminated soil and monitoring of groundwater, among other things. Components of a remedy currently under investigation include providing a potable water supply to the Park Mobil Home Court and certain other residences situated within the contaminated groundwater aquifer, and treating contaminated soil onsite with a soil vapor extraction method. A decision on the remedy is expected to take place in November of 1996.</p>

<p><b>Kennecott (North Zone)</b> Utah (Region 8)</p> <p>Settlement: Administrative Order by the EPA on June 4, 1996, for Removal Action and cost recovery for oversight at operable Unit 8.</p> <p>Estimated Value:     \$76,000,000</p>	<p>Kennecott Utah Copper Company is conducting cleanup activities at the Kennecott North Zone site near Magna, Utah in Salt Lake County after EPA issued an administrative order on June 4, 1996. The estimated cost of the cleanup is \$76,000,000. Streams, ditches, ponds, and wetlands were contaminated by mine wastes from years of smelting and processing ore. The contaminants, identified as lead, arsenic, and selenium, occur in the sludge ponds, slag piles, and tailings ponds on the site. The removal action (OU8) is being conducted in three major steps: a short-term investigation of soils and two long-term cleanup phases. The initial analysis of soils indicates no threat to human health. The two long-term phases address the removal of contaminants from nearby sludge ponds, tailings ponds, surface waters, and groundwater plumes.</p> <p>The company is responsible for cleaning up the site under state and federal supervision. The site was proposed for NPL status in January of 1994. In 1995, however, Kennecott, EPA, and the Utah Department of Environmental Quality (UTDEQ) entered into a memorandum of understanding (MOU). This MOU ensures that Kennecott itself will continue the cleanup process. The EPA, in turn, was to defer the site's final listing on the NPL. In 1996, the U.S. Corps of Engineers (COE) issued a Clean Water Act, Section 404 permit allowing the tailings ponds to be expanded to further the surface cleanup efforts in the future.</p>
<p><b>Mouat Industries</b> Montana (Region 8)</p> <p>Settlement: UAO (UAO03) issued to 6 PRPs on July 22, 1996, for removal actions; notice of intent to comply given in August of 1996.</p> <p>Estimated Value:     \$20,000,000</p>	<p>On July 22, 1996, EPA issued a UAO to six PRPs for removal activities at the Mouat Industries site near Columbus, Montana in Stillwater County. The site served as a plant that processed chromium ore into sodium dichromate from 1957 to 1963. In 1976, yellow mineral deposits containing chromium began to appear at the surface. The soil and groundwater were found to be contaminated with hexavalent chromium, which is the primary health and environmental threat. In 1990, EPA requested that the city of Columbus construct a chain link fence around the contaminated soil area, and re-route the ditches that transported run-off into the contaminated soil area. In addition, monitoring wells drilled in the 1970's were capped.</p> <p>An earlier administrative order (UAO01) was issued by EPA to the PRPs to remove and treat all contaminated soil at the site. This action was completed in 1994. The current administrative order (UAO03) addresses all environmental and health issues (primarily surface water and groundwater) remaining at the site. PRPs gave notice of intent to comply in August 1996.</p>

<p><b>Stringfellow</b> California (Region 9)</p> <p>Settlement: Consent Decree (CD04) lodged on 5/9/96 in the US District Court for the Central District of California for Long-Term Response (LR2).</p> <p>Estimated Value:     \$4,881,300</p>	<p>EPA reached a <i>de minimis</i> settlement with 79 PRPs for Long-Term Response (LR2) pertaining to the Stringfellow site located in Riverside, California. The Consent Decree was lodged in the US District Court for the Central District of California on May 9, 1996.</p> <p>Between 1956 and 1972, approximately 34,000,000 gallons of toxic waste were disposed of at the site. Liquid wastes such as acids and heavy metals were discharged into on-site evaporation pools. Past EPA RODs spanning 1983-1990 called for the maintenance of the existing cap, on-site pre-treatment of contaminated leachate, construction of a groundwater barrier system and surface channels, de-watering the original disposal area, and treating and re-injecting that water. The expected capital cost for the selected remedy is approximately \$1,136,000 with O&amp;M costs around \$1,408,000. As of 1996, EPA was in the process of completing a Feasibility Study (FS) and producing a final Proposed Plan and ROD, which address the remaining soil contamination on the site.</p>
<p><b>Standard Chlorine of Delaware, Inc.</b> Delaware (Region 3)</p> <p>Settlement: UAO (UAO01) for the RD/RA issued on 5/30/96; notice of intent to comply given on 7/1/96</p> <p>Estimated Value:     \$17,000,000</p>	<p>A Unilateral Administrative Order (UAO01) calling for cleanup action was issued by EPA on May 30, 1996, for RD/RA at the Standard Chlorine of Delaware, Inc. site near Delaware City, Delaware in New Castle County. In 1981 and 1986, benzene spills (some containing VOCs) occurred, leaving the soil, groundwater, sediment, and surface water areas contaminated with chlorobenzenes. In addition, wetlands nearby were left under threat of contamination from the spill areas.</p> <p>An earlier EPA ROD also put into effect a final remedy plan. That plan entailed two phases. The first phase included the containment of groundwater by slurry wall or trench as well as the treatment of contaminated groundwater. The second action called for the use of bioremediation to treat contaminated soils and sediments. PRPs gave notice of intent to comply on July 1, 1996.</p>
<p><b>Palmetto Recycling, Inc.</b> South Carolina (Region 4)</p> <p>Settlement: CD (CD01) for RD/RA beginning on 8/14/96.</p> <p>Estimated Value:     \$300,000</p>	<p>EPA reached an agreement with a major PRP on August 14, 1996, for RD/RA activities at the Palmetto Recycling, Inc. site near Columbia, South Carolina. The site was used to reclaim lead from old batteries. Discharge of wastewater of unknown composition into the sewer system and mishandling of wastes containing lead, sulfuric acid, barium, and chromium led to soil, groundwater, and sediment contamination.</p> <p>Two major phases made up the structure of the cleanup process. The first and immediate phase, which was conducted by a major trustee of the company, consisted of removal and treatment of 365 tons of contaminated soil and 10,800 gallons of contaminated water from one of the on-site pits. This action was completed in 1985. The second phase addressed complete cleanup of the entire site, and included an investigation of the severity of site contamination. This action was completed in the fall of 1994, and led to a final remedy chosen by the EPA in 1995 to address contaminated surface soil and groundwater monitoring. Remedy design is expected to begin in early 1997.</p>

<p><b>Fike Chemical, Inc.</b> West Virginia (Region 3)</p> <p>Settlement: CD (CD04) for RD/RA at OU4, RD/RA at OU8, and cost recovery for RA, RV, and RI/FS lodged with the Southern District Court Of West Virginia on 4/24/96.</p> <p>Estimated Value:     \$59,000,000</p>	<p>EPA reached a settlement with 59 PRPs to recover past costs and for RD/RA at Operable Units 4 and 8 at the Fike Chemical, Inc. site in Nitro, West Virginia. The terms of the settlement, which is worth approximately \$59,000,000, are set forth in a consent decree (CD04) that was lodged with the Southern District Court of West Virginia on April 26, 1996. The Consent Decree is expected to be entered into in January of 1997. The 11-acre site, once used as a chemical manufacturing plant and abandoned in 1988, includes trenches in which drummed waste was disposed of. After conducting numerous investigative studies, EPA found the drums to be highly contaminated with VOCs, and other inorganic contaminants. A water treatment facility is also located on the site.</p> <p>An earlier ROD (OU3) focused on removing buried drums and other sources of contamination. Removal of these materials has greatly reduced immediate health and environmental risks to the surrounding area. Cleanup work in Operable Unit 4 (OU4) addressed soil and groundwater contamination. A two-phase investigation of soil and groundwater contamination is underway, and cleanup alternatives are expected to be identified in 1997. The remedy for Operable Unit 8 (OU8) includes the dismantling of the on-site water treatment facility, to be conducted once all cleanup of contaminants has been accomplished.</p>
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