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The Federal Superfund Program: Proposals for Strengthening the Federal/State Relationship

David L. Markell

THE FEDERAL SUPERFUND PROGRAM: PROPOSALS FOR STRENGTHENING THE FEDERAL/STATE RELATIONSHIP

DAVID L. MARKELL*

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*Assistant Professor of Law, Albany Law School. J.D. 1979, University of Virginia; B.A. 1975, Brandeis University. Prior to joining the Law School's faculty in July 1992, Professor Markell worked on Superfund matters for both the federal and state governments. He worked with the New York State Department of Environmental Conservation, from March 1988-April 1992, as Director of the Division of Environmental Enforcement and then from April 1992-July 1992, as Acting Deputy Commissioner for the Office of Environmental Remediation. Professor Markell also served with U.S. EPA's Region 1 Office of Regional Counsel and as a Trial Attorney in the U.S. Department of Justice's Environmental Enforcement Section.

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> How to improve the federal/state "partnership" in the environmental area is a difficult subject. Despite my best attempts to devise simple solutions ..., the situation is not amenable to easy fixes.[1]

Controversy concerning the appropriate division of responsibility and power between the federal government and the states has a long history in the United States, extending back at least to the eighteenth century.[2] This historical dispute encompasses the debate over the

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1. E. Donald Elliott, *Keynote Presentation: Making the Partnership Work*, 22 Envtl. L. Rep. (Envtl. L. Inst.) 10,010, 10,010 (Jan. 1992) (given by Professor Elliott, then General Counsel for the U.S. Environmental Protection Agency).

2. ALICE M. RIVLIN, REVIVING THE AMERICAN DREAM: THE ECONOMY, THE STATES & THE FEDERAL GOVERNMENT 8 (1992) (stating that "[t]he argument about which functions should be exercised by the federal government and which by the states has been going on for more than two hundred years"). Rivlin expresses her view that

century.[2] This historical dispute encompasses the debate over the appropriate locus of authority for environmental regulation.[3]

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2. ALICE M. RIVLIN, REVIVING THE AMERICAN DREAM: THE ECONOMY, THE STATES & THE FEDERAL GOVERNMENT 8 (1992) (stating that "[t]he argument about which functions should be exercised by the federal government and which by the states has been going on for more than two hundred years"). Rivlin expresses her view that "[t]here are no 'right' answers. The prevailing view shifts with changing perceptions of the needs of the country and the relative competence and responsiveness of the states and the federal government." *Id.*

3. *See generally* BRUCE A. ACKERMAN & WILLIAM T. HASSLER, CLEAN COAL/DIRTY AIR 5-6 (1981) (discussing the concept of "cooperative federalism" under which "states, operating under loose federal supervision, are asked to design a program responsive to the peculiarities of local conditions"); Adam Babich, *Coming to Grips With Toxic Waste: The Need for Cooperative Federalism in the Superfund Program*, 19 Envtl. L. Rep. (Envtl. L. Inst.) 10,009 (Jan. 1989) (arguing that EPA should provide oversight and funding for the federal Superfund program, while state and local governments implement the program); Martin H. Belsky, *Environmental Policy Law in the 1980's: Shifting Back the Burden of Proof*, 12 ECOLOGY L.Q. 1 (1984) (summarizing the evolution of the federal/state relationship in environmental regulation); James R. Elder et al., *Regulation of Water Quality: Is EPA Meeting Its Obligations or Can the States Better Meet Water Quality Challenges? Recent Controversies over Toxics that Originally Were Not Regulated Lead to Questions About EPA's Ability to Regulate Effectively*, 22 Envtl. L. Rep (Envtl L. Inst.) 10,029 (Jan. 1992) (authors express differing opinions as to whether states are better able to regulate water quality than the federal government); Nancy Firestone et al., *Regulating Solid and Hazardous Wastes: Has Federal Regulation Lived Up to Its Mandate or Can the States Do a Better Job?*, 22 Envtl. L. Rep. (Envtl. L. Inst) 10,038 (Jan. 1992) (authors express differing opinions as to whether states are better able to regulate solid and hazardous waste than the federal government); Hubert H. Humphrey III & Leroy C. Paddock, *The Federal and State Roles in Environmental Enforcement: A Proposal for a More Effective and More Efficient Relationship*, 14 HARV. ENVTL. L. REV. 7 (1990) (providing a history of the allocation of responsibility for environmental enforcement between the federal and state governments, and urging that states occupy a position of primacy once they have established their capability to handle such responsibilities); Dixie L. Laswell, *State-Federal Relations Under Subtitle C of the Resource Conservation and Recovery Act*, 16 NAT. RESOURCES L. 641 (1984) (arguing that EPA has unduly restricted states from administering their own hazardous waste programs); David M. Levy, Comment, *Federalism and the Environment:* National Solid Waste Management v. Alabama Dep't of Envtl. Management, 12 WHITTIER L. REV. 635 (1991) (suggesting that the current trend in regulation is for Congress to encourage states to take an active role in environmental protection); Julie J. Thompson, Comment, *Municipal Solid Waste Management: The States Must Pick Up Where Congress Left Off*, 23 AKRON L. REV. 587 (1990) (arguing that the federal government has done little to address solid waste management and that states should take the lead); James P. Young, Comment, *Expanding State Initiation and Enforcement Under Superfund*, 57 U. CHI. L. REV. 985

This Article discusses the appropriate role for states under the federal environmental law that governs the remediation of toxic waste sites, formally known as the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund").[4] The Article identifies the major problem areas in the federal/state partnership under this existing law and discusses possible solutions.

Section I of the Article provides an overview of the history of the federal Superfund program as well as a summary of the program's performance during its thirteen-year history. Section II contains findings and recommendations concerning how best to improve the federal/state relationship under CERCLA by making changes within the existing framework for federal/state relations. Section III describes three alternative models for radically restructuring the federal/state relationship under CERCLA rather than refining the existing structure.

The author's research into the role that states actually play, and ideally should play, in the federal Superfund program was substantially aided by more than thirty detailed interviews, which the author conducted, with representatives of all of the major "stakeholders" in the federal Superfund program. Interviewees included representatives of the following organizations: United States Environmental Protection Agency ("EPA") Headquarters, EPA regional offices, United States Congress, United States Department of Justice, state regulatory agencies, state

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(1990) (arguing that EPA's role in Superfund should be limited to oversight and that the states should be given control over implementation of remedial actions).

4. CERCLA §§ 101-405, 42 U.S.C. §§ 9601-9675 (1988 & Supp. III 1991). Congress originally enacted CERCLA in December 1980. Pub. L. No. 96-510, 94 Stat. 2767 (1980) (codified as amended at 42 U.S.C. §§ 9601-9675). The original Act authorized over $1 billion to pay for site cleanups. CERCLA § 111(a), 42 U.S.C. § 9611(a) (1988 & Supp. III). In October 1986, Congress reauthorized CERCLA for another five years in the Superfund Amendments and Reauthorization Act ("SARA"), and increased the size of the trust fund to $8.5 billion. *Id.* (SARA appears at Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified as amended at 42 U.S.C. §§ 9601-9675)). In an amendment to the 1990 budget, Congress extended the 1991 expiration date for another four years through September 1994, and provided an additional $5.1 billion in funding. Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, § 6301, 104 Stat. 1388, 1388-319 (1990) (codified as amended at 42 U.S.C. § 9611(a)). The term "Superfund," originally termed the Hazardous Substance Response Trust Fund, derives from the trust fund originally created under CERCLA in 1980. Lawrence E. Starfield, *The 1990 National Contingency Plan -- More Detail and More Structure, But Still a Balancing Act*, 20 Envtl. L. Rep. (Envtl. L. Inst.) 10,222, 10,225 n.1 (June 1990).

attorneys general, citizen groups and responsible parties.[5]

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5. Each interview typically lasted from one to three hours. In addition to the more than 30 individuals whom the author interviewed, officials from Clean Sites, Inc., conducted a number of interviews as well, using questionnaires developed by the author. All of these interviews were conducted on a "not for attribution" basis in order to promote the candid expression of views.

One goal was to select interviewees who would represent a good cross-section of the states. Interviewees included officials from six of the ten states with more than 100 people working on cleanup activities (California, Massachusetts, New Jersey, New York, Ohio and Washington); officials from one of the three states with between 51 and 100 people (Minnesota); and officials from two of the 28 states with between 11 and 50 people (Virginia and New Hampshire). No one from a state with fewer than 10 people was interviewed. For additional information on the size of various state Superfund programs, see OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, PUB. NO. 9375.6-08B, AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 1991 UPDATE, at 15 & Figure III-2 (1991) [hereinafter 50-STATE STUDY, 1991 UPDATE]. This update is the most recent of three editions of the *50-State Study*. For two earlier versions, see OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, PUB. NO. EPA/540/8-91/002, AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY (1989) [hereinafter 50-STATE STUDY, 1989]; and OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, PUB NO. EPA/540/8-89/001, AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 1990 UPDATE (1990) [hereinafter 50-STATE STUDY, 1990 UPDATE].

From the federal government, interviewees included officials from several different groups within EPA Headquarters, as well as officials from EPA Regions 1, 2, 3, 5 and 10. Interviewees from both EPA Headquarters and EPA regions were also included because EPA Headquarters' officials and regional officials often have dramatically different perspectives on particular issues. Regional officials also differ among themselves. THOMAS W. CHURCH & ROBERT T. NAKAMURA, CLEANING UP THE MESS: IMPLEMENTATION STRATEGIES IN SUPERFUND 9 (1993).

Further, the author attempted to get both sides of the story by interviewing federal and state officials who interact professionally with each other. For example, the author interviewed both EPA Region I officials, who cover the New England states, and state officials from two of these states, Massachusetts and New Hampshire.

Finally, the author interviewed representatives from the potentially responsible party ("PRP") community and from environmental groups. The terms "responsible parties" or "PRPs" are shorthand references for parties liable under the CERCLA § 107 liability scheme. 42 U.S.C. § 9607 (1988 & Supp. III 1991). *See infra* notes 32-34 and accompanying text. Within this group, the author interviewed industry officials, but did not talk with representatives of specific sub-groups such as municipal officials or federal facility representatives.

I. BACKGROUND ON THE SUPERFUND PROGRAM

A. *A Condensed History of Superfund from its Inception in 1980 to the Current Debate on Reauthorization of the Superfund Law*

1. *Environmental Catastrophes*

The seeds for the federal Superfund program were sown in places such as Love Canal, located in Niagara Falls, New York. A 1978 report from the New York State Office of Public Health, entitled *Love Canal: Public Health Time Bomb*,[6] captures the mood that prevailed in the late 1970s and led to the December 1980 passage of the federal Superfund law:

> Love Canal is a name which until recently was relegated to the back pages of history along with the unspent dreams of a visionary for whom it is named.
>
> Today, more than three-quarters of a century later, this 16-acre rectangular piece of land, located only a few miles from the world-famous waterfall which each year attracts thousands to ... Niagara Falls, has again become the focus of international attention ....
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> ....
>
> Described as an environmental time bomb gone off, Love Canal stands as testimony to the ignorance, [and the] lack of vision and proper laws of decades past which allowed the indiscriminate disposal of ... toxic materials.
>
> The consequences of these transgressions are mirrored by the planned exodus of 235 families and the public monies and herculean efforts which now must be expended to contain the disaster and restore a degree of normalcy to the lives of those affected.
>
> For those responsible for containing the problem and for government leaders in New York State and throughout the nation, Love Canal represents what may

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6. LOVE CANAL: PUBLIC HEALTH TIME BOMB, A SPECIAL REPORT TO THE GOVERNOR AND LEGISLATURE (Sept. 1978) (prepared by the New York State Office of Public Health and the Governor's Love Canal Inter-Agency Task Force) [hereinafter LOVE CANAL REPORT].

> very well be the first of a new and sinister breed of environmental disasters.[7]

The name "Love Canal" became synonymous with toxic waste disposal through events that took almost a century to culminate.[8] In May 1892, William T. Love arrived in Niagara Falls with a "long-held dream: to build a carefully planned industrial city with convenient access to inexpensive water power and major markets."[9] At the heart of Love's dream was the creation of a canal that would provide power from the nearby upper and lower Niagara Rivers to this industrial complex.[10] The canal would convey water to the Niagara Terrace, enabling Love to create an immense quantity of water power through the 300-foot drop in the water level at the Terrace.[11] The plan seemed to be a good idea because at the time, water power was the cheapest form of power, and it was essential that power users be located near the source because it was almost impossible to transmit electricity over any great distance.[12]

Love, "a man of considerable energy and charisma," succeeded in galvanizing public support for his vision, including gaining legislative authority to condemn properties and to divert as much water from the upper Niagara River as he deemed necessary, "even to the extent of turning off Niagara Falls!"[13] He obtained financial backing as well, and

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7. *Id.* at 3.
8. *Id.* at 2-3.
9. *Id.* at 2.
10. *Id.*
11. *Id.*
12. *Id.*
13. *Id.* Mr. Love "extensively promoted his model city through ads, circulars and even brass bands playing his 'original' ditty." *Id.* The first three verses of the "ditty," entitled "The Model City," illustrate the optimism surrounding Love's vision:

THE MODEL CITY
(Tune of Yankee Doodle)

Every body's [sic] come to town,
Those left we all do pity,
For we'll have a jolly time
At Love's new Model City.
(Chorus)
If you get there before I do
Tell 'em I'm a comin' too
To see the things so wondrous true
At Love's new Model City.

in October 1893, the first factory on his townsite opened.[14] In May 1894, work to build the canal began.[15]

Love's realization of his vision was interrupted by a "full-scale economic depression," which caused his financial backing to begin to slip away.[16] The "coup-de-grace" was delivered by the discovery of a way to transmit power economically over long distances. This technological advance dealt Love's project a "death blow."[17]

Love's personal reversals resulted in the foreclosure of his property and its sale at a public auction in 1910.[18] The "sole surviving monument" to Love's vision was a partially dug section of canal in the southeast corner of the City of Niagara Falls.[19] The Love Canal report indicates that in the early portion of the twentieth century this part of the canal served as a swimming hole.[20] The report indicates that,

> the excavation was turned to a new and ominous use [in the 1920s]. It [the canal] became a chemical and municipal disposal site for several chemical companies and the City of Niagara Falls. Chemicals of unknown kind and quantity were buried at the site for a 25-30 year period, up until 1953. After 1953, the site was covered with earth.[21]

The report also notes that during the late 1950s, the community built an elementary school and approximately one hundred single-family homes directly adjacent to the Love Canal landfill.[22]

(Chorus)
They'r [sic] building now a great big ditch
Through dirt and rock so gritty
They say 'twill make all very rich
Who live in Model City[.]

Id.

14. *Id.* at 3.
15. *Id.*
16. *Id.*
17. *Id.*
18. *Id.*
19. *Id.*
20. *Id.*
21. *Id.*
22. *Id.*

The Love Canal report continues by describing the discovery and response to contamination:

> [T]he Love Canal problem began to surface in recent years as chemical odors in the basements of the homes bordering the site became more noticeable. This followed prolonged heavy rains and one of the worst blizzards ever to hit this section of the country.
>
> Thus began a series of events and momentous decisions involving city, county, State and Federal governments to cope with what can only be described as a major human and environmental tragedy without precedent and unparalleled in New York State's history.[23]

New York State dealt with this tragedy by taking the following actions.[24] State of New York Health Commissioner Whalen termed the Love Canal "'an extremely serious threat to the health and welfare'" and ordered immediate remedial measures to remove visible chemicals, restrict access to the site and initiate health and engineering studies.[25] State officials also discovered that "unacceptable levels of toxic vapors associated with more than 80 compounds were emanating from the basements of many homes in the first ring directly adjacent to the Love Canal."[26] Based on "preliminary epidemiologic investigations" showing a concentration of miscarriages in certain residential areas near Love Canal, the Office of Public Health recommended "immediate relocation of all pregnant women and all children under two years of age from the

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23. *Id.* New York State Health Commissioner Robert P. Whalen, M.D., in his November 2, 1978, order, described the situation:

> [S]aid site constitutes a public nuisance and an extremely serious threat and danger to the health, safety and welfare of those using it, living near it, or exposed to the conditions emanating from it, consisting, among other things, of chemical wastes lying exposed on the surface in numerous places and pervasive, pernicious and obnoxious chemical vapors and fumes affecting both the ambient air and the homes of certain residents living near such site ....

Id. at 27.

24. *See id.* at 23-25 (setting forth a chronology of events).

25. *Id.* at 6.

26. *Id.*

Love Canal area."[27] Finally, by August 10, 1978, the state decided "to offer to relocate and purchase the homes of all 235 families [living] in the first two rings [around Love Canal]."[28]

2. *The Federal Government's Response*

In early 1980, public outrage over scenes of environmental degradation like Love Canal -- chemicals seeping out of the ground into basements, abandoned drums of hazardous waste leaking into farmers' fields and similar threats to our sense of well-being and security -- resounded throughout the country. In December 1980, Congress reacted to this outrage by passing the Comprehensive Environmental Response, Compensation, and Liability Act,[29] better known as Superfund.[30] Congress designed CERCLA to deal with the legacy of the less appealing side of our industrial society over the past century -- the disposal of hazardous materials in ways that jeopardize the health of our citizens and the quality of our environment.[31]

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27. *Id.* at 12-15.

28. *Id.* at 18.

29. Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675 (1988 & Supp. III 1991)).

30. *See* Richard C. Belthoff, *Private Cost Recovery Actions Under Section 107 of CERCLA*, 11 COLUM. J. ENVTL. L. 141, 143 (1986) (discussing the origin of CERCLA as a reaction to hazardous waste disasters such as Love Canal, the Times Beach incident, and Valley of the Drums, and noting that "Love Canal may have benn [sic] the major consciousness-raising episode that led to the enactment of CERCLA"); Frederick R. Anderson, *Negotiation and Informal Agency Action: The Case of Superfund*, 1985 DUKE L.J. 261, 263-65 (1985) (discussing CERCLA's background as a statute intended to tackle the clean up of past hazardous waste disposal sites, including Love Canal); Sharon L. McCarthy, Note, *CERCLA Cleanup Costs under Comprehensive General Liability Insurance Policies: Property Damage or Economic Damage?*, 56 FORDHAM L. REV. 1169, 1169-74 (1988) (discussing the origin of CERCLA and naming environmental disasters such as Times Beach, Love Canal, and the Valley of the Drums as events that led to the enactment of CERCLA); WILLIAM K. REILLY, U.S. ENVTL. PROTECTION AGENCY, A MANAGEMENT REVIEW OF THE SUPERFUND PROGRAM i (June 1989) (Superfund was "[s]peedily launched in response to such dramatic episodes as the Love Canal ....") [hereinafter 90-DAY STUDY]. The *90-Day Study* was a 90-day review of the Superfund program conducted by EPA Administrator Wlliam Reilly.

31. *See* Anderson, *supra* note 30, at 264-65. For a portion of the legislative history of CERCLA, see *Hazardous Waste Disposal: Hearings Before the Subcomm. on Oversight and Investigations of the House Comm. on Interstate and Foreign Commerce,*

When Congress enacted CERCLA, it established a statutory scheme that it hoped would give the government a very strong hand in deciding "who pays" for cleaning up Love Canal and similar sites.[32]

96th Cong., 1st Sess. (1979); *Hazardous Waste Disposal: Our Number One Environmental Problem: Hearing before the Subcomm. on Transportation and Commerce of the House Comm. on Interstate and Foreign Commerce*, 96th Cong., 2nd Sess. (1980); *see also* Frank P. Grad, *A Legislative History of the Comprehensive Environmental Response, Compensation, and Liability ("Superfund") Act of 1980*, 8 COLUM. J. ENVTL. L. 1 (1982).

Congress enacted CERCLA to fill a gap left by the Resource Conservation and Recovery Act ("RCRA"). Pub. L. No. 94-580 (1976) (codified as amended at 42 U.S.C. §§ 6901-6991 (1988 & Supp. III 1991)). RCRA is known as a "cradle-to-grave" statute because it covers the management of hazardous waste from its creation to disposal, but not beyond disposal. Elizabeth Cheng, *Lawmaker as Lawbreaker: Assessing Civil Penalties Against Federal Facilities Under RCRA*, 57 U. CHI. L. REV. 845, 846 (1990) ("RCRA, passed in 1976, established a 'cradle-to-grave' scheme of measures -- including permits, monitoring, and recordkeeping -- for regulating the generation, transport, treatment, and disposal of solid waste"). RCRA does contain a remedial component but provides only limited authority to clean up hazardous waste sites, that is, RCRA does not contain a federal remedial fund. RCRA §§ 3008, 7003, 42 U.S.C. §§ 6928, 6973 (1988 & Supp. III 1991).

32. *See* McCarthy, *supra* note 30, at 1172. Because much of the disposal of hazardous substances that created Superfund sites was not illegal at the time it occurred, many commentators have criticized CERCLA for its unfairness in holding liable the companies responsible for such disposal. *See, e.g., Insurance Industry Officials Recommend Ending Superfund Retroactive Liability*, HAZARDOUS WASTE NEWS, Nov. 18, 1991; *Superfund Steeped in Litigation Costs*, ENVTL. COMPLIANCE UPDATE, June 1992; *Superfund Law Should Be Shorn of Retroactivity, Study Says*, LIABILITY WEEK, Jan. 19, 1993.

The courts, however, characterize Congress' policy as a judgment of whether the public or such companies should pay to clean up these vestiges of our past. Even if the companies' conduct was in complete compliance with the law in effect at the time of disposal, Congress decided that the companies, and not the public, should bear the burden; the courts have upheld this policy judgment. *See, e.g.*, Philadelphia v. Stepan Chem. Co., 748 F. Supp. 283, 287 (E.D. Pa. 1990) ("Although CERCLA does not expressly provide for retroactivity, it is clear from the statutory language that Congress intended for CERCLA to have retroactive effect"); *see also* United States v. Shell Oil Co., 605 F. Supp. 1064, 1072, 1077-79 (D. Colo. 1985) (outlining the legislative history of CERCLA and its original Senate bill, S. 1480, and concluding that Congress intended CERCLA to be applied retroactively, and that such retroactive application does not violate due process); United States v. Northeastern Pharmaceutical & Chem. Co., 810 F.2d 726, 734, 737 (8th Cir. 1986), *cert. denied*, 484 U.S. 848 (1987) (following *Shell Oil* and finding that CERCLA was intended to be applied retroactively, and this retroactive application of CERCLA does not violate due process);

CERCLA makes four classes of persons strictly liable for Superfund sites: (1) the present owner or operator of such sites; (2) persons who owned or operated such sites at the time of disposal of hazardous substances; (3) persons who arranged for the disposal, treatment or transport of hazardous substances at the sites; and (4) persons who accept or accepted hazardous substances for transport to such sites.[33] Over the past thirteen years, courts almost uniformly have sided with the

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United States v. Hooker Chem. & Plastics Corp., 680 F. Supp. 546, 556-57 (W.D.N.Y. 1988) (holding that CERCLA was enacted as a means to impose retroactive liability, and this retroactive liability does not violate the Due Process Clause, the Takings Clause of the Fifth Amendment, or the Article I Contract Clause).

33. CERCLA § 107(a)(1)-(4), 42 U.S.C. § 9607(a)(1)-(4) (1988 & Supp. III 1991). These parties are liable for the following costs:

> (A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan;
> (B) any other necessary costs of response incurred by any other person consistent with the national contingency plan;
> (C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and
> (D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

Id. § 107(a)(4)(A)-(D), 42 U.S.C. § 9607(a)(4)(A)-(D). Only very limited defenses are available to parties that fall within this liability net. In particular, CERCLA provides four narrow defenses:

> (1) an act of God;
> (2) an act of war;
> (3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant ..., if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned ..., and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or
> (4) any combination of the foregoing paragraphs.

Id. § 107(b)(1)-(4), 42 U.S.C. § 9607(b)(1)-(4).

government on questions involving the nature and scope of liability under CERCLA.[34]

In addition to "Who pays?," the second major question addressed by CERCLA is "How clean is clean?" This issue focuses on the level to which contaminated sites must be cleaned up and the type of cleanup that is appropriate.[35] Because the average federal Superfund site now

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34. *See, e.g.*, United States v. Conservation Chem. Co., 619 F. Supp. 162, 195 (W.D. Mo. 1985) (construing liberally EPA's injunctive authority under CERCLA § 106 and holding that the government does not have to show the actual existence of an "imminent and substantial endangerment" to establish jurisdiction for injunctive relief under § 106. Instead, the government must show only that "the circumstances of a release or threatened release of hazardous substances are such that the environment or members of the public may become exposed to such substances and are therefore put at risk"); United States v. Fleet Factors Corp., 901 F.2d 1550 (11th Cir. 1990), *cert. denied*, 111 S. Ct. 752 (1991) (extending CERCLA's past owner or operator liability to secured creditors who participated in financial management of a facility to a degree evidencing a capacity to influence the debtor's handling of hazardous waste); United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983) (Rubin, J.) (construing CERCLA, which was silent on the nature of liability, to impose joint and several liability on responsible parties). *See also* Elizabeth A. Di Cola, *Fairness and Efficiency: Allowing Contribution Under ERISA*, 80 CAL. L. REV. 1543, 1581 n.249 (1992) ("[T]he House Committee on Energy and Commerce 'fully subscribes to the reasoning of the court in the seminal case of *United States v. Chem-Dyne Corporation*, which establishes a uniform federal rule allowing for joint and several liability in appropriate CERCLA cases.'") (quoting H.R. REP. NO. 253 (I), 99th Cong., 2d Sess. 74 (1985)). *Fleet Factors* represents "[t]he apogee of CERCLA's power," with the Eleventh Circuit's decision "highlight[ing] the extraordinary scope of a liability net that seemed to be expanding without bounds ...." Stephen L. Kass & Michael B. Gerrard, *The Taming of the EPA*, N.Y. L.J., Apr. 23, 1993, at 3.

In *The Taming of the EPA*, however, Kass and Gerrard suggest that the pendulum has begun to swing the other way, stating that while "[u]ntil two or three years ago, the U.S. Environmental Protection Agency seemed nearly invincible in its enforcement of CERCLA ..., [t]he judicial winds blowing over the Superfund law have shifted." *Id.* at 3. Nevertheless, these commentators concede that "EPA retains significant authority and leverage under CERCLA," and conclude their article by saying that they are not suggesting that "defendants seeking to defeat liability still do not have a steep uphill climb. But at least they now face a steep climb rather than a sheer rock wall with no handholds." *Id.* at 4.

35. When Congress amended CERCLA in 1986 by passing SARA, Congress addressed "How clean is clean?" in much more detail. Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified as amended at 42 U.S.C. §§ 9601-9675 (1988 & Supp. III 1991)). In the 1986 Amendments, Congress created CERCLA § 121, 42 U.S.C. § 9621, to address cleanup standards. EPA summarizes SARA's impact on the degree of clean up in the Preamble to the 1990 regulations implementing CERCLA, known as the National

costs $29 million to clean up, with estimates of the total cleanup bill ranging from $80 billion to $1 trillion, and because of claims that the actual threats from these sites do not warrant spending amounts of this magnitude given the other problems our society confronts, this issue has received a great deal of attention in recent years.[36]

The controversy surrounding these two issues, "Who pays?" and "How clean is clean?," means that CERCLA begins the formal road to reauthorization in the 103d Congress labeled "'without a doubt' the most contentious and complicated issue facing the Senate Environment &

Contingency Plan ("NCP"):

> Among the major new provisions added by SARA are CERCLA sections 121(a) through 121(d), which ... stipulat[e] general rules for the selection of remedial actions, ... describing requirements for the degree of cleanup. These new sections codify rigorous remedial action cleanup standards by mandating that on-site remedial actions meet applicable or relevant and appropriate federal standards and more stringent state standards.

55 Fed. Reg. 8666, 8667 (1990).

For an in depth discussion of EPA's treatment of the issue of "How clean is clean?," see Starfield, *supra* note 4, at 10,230-36.

36. *See, e.g.*, U.S. GENERAL ACCOUNTING OFFICE, STATUS OF PROGRESS IN CORRECTING SELECTED HIGH-RISK AREAS, TESTIMONY BEFORE THE SUBCOMM. ON OVERSIGHT COMM. ON WAYS AND MEANS, HOUSE OF REPRESENTATIVES (Feb. 3, 1993) [hereinafter STATUS OF PROGRESS]. With the 1200 plus sites that are on the federal Superfund list, the total remediation bill will be in the tens of billions of dollars. The actual number of sites requiring cleanup is expected to dwarf the 1200 plus sites currently on EPA's list. *Id.*; *see infra* note 67 and accompanying text. The ultimate cleanup bill, therefore, is likely to escalate dramatically as well. Estimates concerning the total cleanup cost vary widely. One estimate is that the cost of cleaning up hazardous waste sites will total at least $110 billion. ORIN KRAMER & RICHARD BRIFFAULT, CLEANING UP HAZARDOUS WASTE: IS THERE A BETTER WAY? iii (1993). Two other studies project clean up costs approaching $1 trillion. *See* Lynne A. Reinders, Note, *Municipal Liability Under Superfund as Generators of Municipal Solid Waste: Addressing the Plight of Local Governments*, 43 WASH. U. J. URB. & CONTEMP. L. 419, 423 n.19 (1993) (citing *Study Finds Potential Hazardous Waste Cleanup Costs May Top $1.5-Trillion*, INSIDE EPA, Jan. 3, 1992, at 13 (citing a study done by the University of Tennessee)); Frank Viviano, *Superfund Wallowing in Financial Mire*, MILWAUKEE. J., June 16, 1991, at J1, J3 (citing an estimate given by Salomon Brothers, a brokerage firm, and Hirschhorn and Associates, an environmental consulting firm).

Public Works Committee."[37] To paraphrase a recent headline, Congress, the administration and a multitude of interest groups are "bracing" for what promises to be a "rewrite battle" over the future shape of Superfund.[38] Groups from every point on the political spectrum are mobilizing in an effort to leave their imprint.[39]

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37. *Superfund Called Second Priority for Senate Environment Committee*, SUPERFUND REP. Apr. 21, 1993 at 5 (SUPERFUND REP. is an environmental newsletter that covers Superfund matters). *See also House, Senate to Hold Superfund Hearings This Week*, SUPERFUND REP. May 5, 1993 at 8.

38. ENV'T TODAY, April 1993, at 1. Superfund already has been the subject of an enormous amount of commentary, much of it negative. *See* OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, PUB. NO. OTA-ITE-433, COMING CLEAN: SUPERFUND'S PROBLEMS CAN BE SOLVED ..., at iii (October 1989) [hereinafter COMING CLEAN] (foreword by John Gibbons, Director of the Office of Technology Assessment ("OTA"), U.S. Congress) ("From its beginning, controversy has surrounded Superfund, and the program has had to cope with an unusually high level of public scrutiny, criticism, and debate"). *See, e.g.*, William N. Hedeman, et al., *Superfund Transaction Costs: A Critical Perspective on the Superfund Liability Scheme*, 21 Envtl. L. Rep. (Envtl. L. Inst.) 10,413 (July 1991); ALFRED R. LIGHT, BUREAU OF NATIONAL AFFAIRS, ILLUMINATING IRRATIONALITY: SELF-DECEPTION AND SUPERFUND LITIGATION (1992); NATIONAL PAINT AND COATINGS ASS'N, A STATEMENT OF THE PROBLEM AND SOME IDEAS FOR IMPROVEMENT OFFERED BY THE NATIONAL PAINT AND COATINGS ASS'N, INC., IMPROVING THE SUPERFUND: CORRECTING A NATIONAL POLICY DISASTER (1992); KRAMER & BRIFFAULT, *supra* note 36; U.S. GENERAL ACCOUNTING OFFICE, SUPERFUND: EPA COST ESTIMATES ARE NOT RELIABLE OR TIMELY, REPORT TO THE ADMINISTRATOR ENVIRONMENTAL PROTECTION AGENCY (July 1992); U.S. GENERAL ACCOUNTING OFFICE, GAO REP. NO. GAO/RCED-92-138, SUPERFUND: PROBLEMS WITH THE COMPLETENESS AND CONSISTENCY OF SITE CLEANUP PLANS, REPORT TO THE CHAIRMAN, SUBCOMM. on SUPERFUND, OCEAN AND WATER PROTECTION, COMM. ON ENV'T AND PUB. WORKS, U.S. SENATE (May 1992) [hereinafter PROBLEMS WITH SITE CLEANUP PLANS].

39. *See Agency Grapples With Issues as Reauthorization Hearings Set to Begin*, SUPERFUND REP., Apr. 7, 1993, at 7 (quoting an EPA official as saying that "it's hard to find a group not exploring Superfund.") EPA itself has formed a "broad-based committee" as a subcommittee of the National Advisory Council on Environmental Policy & Technology ("NACEPT") to serve as an advisory committee to the EPA Administrator on Superfund. *New 'Superfund Evaluation Committee' Launches Series of Meetings*, SUPERFUND REP., June 16, 1993, at 6. A short list of the various groups developing positions on Superfund includes the following organizations: the Superfund Improvement Project (created by the American Insurance Association); the Coalition on Superfund (a group of companies from four industry segments: natural resources and chemicals, insurance, manufacturing, and environmental sciences); the Hazardous Waste Cleanup Project (a coalition of eight major industry trade associations); the U.S. Chamber of Commerce; the National Association of Manufacturers Superfund Task

A third significant issue for the reauthorization debate involves the respective roles the state and federal governments should play in the federal Superfund program.[40] Indeed, "[t]he issue of [the] states' role in Superfund is emerging as one of the most prominent the agency and Congress will address during reauthorization."[41] Despite its importance,

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Force; the National Commission on Superfund (jointly sponsored by the Keystone Center and the Vermont Law School's Environmental Law Center); the National Association of Attorneys General; and the Association of State and Territorial Reform. Recently, several environmental groups have urged that EPA should try administrative fixes to Superfund rather than changing the statute itself. *Environmentalists Urge Lawmakers to Hold Off on Changes to Statute*, SUPERFUND REP., Apr. 21, 1993, at 5. At this point in time, Congress does not appear to be accepting this strategy. For articles referencing the involvement of these and other organizations in the Superfund reauthorization debate, see generally *State Attorneys to Develop Reauthorization Position*, ENVTL. POL'Y ALERT, Apr. 14, 1992, at 9; SUPERFUND REP., Mar. 10, 1993, at 6; *EPA Seeks Administrative Fixes for Superfund Before Reauthorization*, SUPERFUND REP., May 5, 1993, at 4; *Key Senator Says Congress Should Move Ahead With Reauthorization*, SUPERFUND REP., May 5, 1993, at 5; Env't Rep. (BNA) 10 (May 7, 1993); *National Commission on Superfund Meets With EPA, Hill Staffers*, SUPERFUND REP., June 16, 1993, at 8; *Industry Coalition Unveils Superfund Stance, Attacking Risk Assessment*, ENVTL. POL'Y ALERT, July 7, 1993, at 4.

40. In addition to giving states a role in the federal Superfund program, CERCLA also gives political subdivisions and federally recognized Indian tribes opportunities to participate in the program. *See generally* CERCLA §§ 101, 104, 107, 126 U.S.C. §§ 9601; 9604, 9607, 9626 (1988); OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, STATUS OF STATE INVOLVEMENT IN THE SUPERFUND PROGRAM, FY 80 TO FY 89, at 1 (Apr. 1990) [hereinafter STATE INVOLVEMENT] (focusing on issues relating to state involvement).

41. *EPA Administrator Says States Must Play a 'Strong Role' in Superfund*, SUPERFUND REP., Apr. 7, 1993, at 4. Bruce Diamond, Director of EPA's Office of Waste Programs Enforcement, is quoted as saying that the issue of the states' role in Superfund is "probably the most difficult issue to be confronted during reauthorization, because it is interwoven with all other aspects of the program." *Id.* Thomas Grumbly, then President of Clean Sites, Inc., and recently confirmed as Assistant Secretary for Environmental Restoration and Waste Management at the U.S. Department of Energy, described the issue of the states' role in Superfund as "in many ways the threshold issue. [It] will set the stage for which way we go with Superfund." *Id.* at 5-7. EPA Administrator Browner has personally emphasized the importance of EPA's improving its partnership with state and local governments, stating that "it is these relationships that will make or break national environmental efforts." Env't Rep. (BNA) 3118 (May 9, 1993); Carol M. Browner, Administrator, U.S. Envtl. Protection Agency, *Statement Before the Comm. on Env't and Pub. Works, U.S. Sen.*, at 1 (Mar. 31, 1993) (on file with author); *see also Waste Identification -- Talks Progress Slowly as Disagreements Persist*, ENVTL. POL'Y ALERT, Mar. 31, 1993, at 13 ("[T]he role of states and the

the issue, which is the focus of the Article, has received relatively little attention to date.[42]

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question of 'how clean is clean' are among the most prominent issues facing EPA as it gears up for reauthorization. ... Allocation of costs is the third 'key issue'"). EPA's 90-Day Study recognized the importance of this issue to Superfund's success as well, listing as one of its 50 recommendations for improving Superfund, the need to "[r]esolve the fundamental policy question of what States' long-term role in the Superfund program will be, [and to] develop short- and long-term strategies to enhance State program capability." 90-DAY STUDY, *supra* note 30, at v.

42. The following is a partial list of articles discussing state Superfund progress and the federal/state relationship concerning Superfund matters: Donald A. Brown, *EPA's Resolution of the Conflict Between Cleanup Costs and the Law in Setting Cleanup Standards Under Superfund*, 15 COLUM. J. ENVTL. L. 241 (1990); David L. Markell & Dolores A. Tuohy, *Some Thoughts on Running a Superfund Enforcement Program: A State Perspective*, NAT'L ENVTL. ENFORCEMENT J., Nov. 1990, at 3; James P. Young, Comment, *Expanding State Initiation and Enforcement Under Superfund*, 57 U. CHI. L. REV. 985 (1990) (arguing that the states, not the federal government, should control hazardous waste cleanups); Jeremy M. Firestone & Robert P. Reichel, *The Role of States in the CERCLA Process After* United States v. Azko Coatings of America, Inc., NAT'L ENVTL. ENFORCEMENT J., June 1992, at 3; Eric Nelson & Ann Hurley, *The Slow but Steady Evolution of State Enforcement under Superfund*, ALI-ABA COURSE OF STUDY: HAZARDOUS WASTES, SUPERFUND, AND TOXIC SUBSTANCES 33-59 (1992); *see also* David L. Markell, Assistant Professor, Albany Law School, *Statement Before the Subcomm. on Transp. and Hazardous Materials of the Comm. on Energy and Commerce, U.S. House of Representatives* (Oct. 28, 1993) (on file with author).

Different groups within government, including EPA itself, the Office of Technology Assessment and the General Accounting Office, have evaluated this issue as well. *See, e.g.*, 50-STATE STUDY, 1989, *supra* note 5; 50-STATE STUDY, 1990 UPDATE, *supra* note 5; 50-STATE STUDY, 1991 UPDATE, *supra* note 5; STATE INVOLVEMENT, *supra* note 40; COMING CLEAN, *supra* note 38: U.S. GENERAL ACCOUNTING OFFICE, GAO REP. NO. GAO/RCED-89-164, HAZARDOUS WASTE SITES: STATE CLEANUP STATUS AND ITS IMPLICATIONS FOR FEDERAL POLICY, REPORT TO THE CHAIRMAN, SUBCOMM. ON ENV'T, ENERGY, AND NATURAL RESOURCES, COMM. ON GOV'T OPERATIONS, HOUSE OF REPRESENTATIVES (Aug. 1989) [hereinafter STATE CLEANUP STATUS]; PROBLEMS WITH SITE CLEANUP PLANS, *supra* note 38; *see also The Role of EPA and the States In Hazardous Waste Site Cleanups: Hearing before the Env't, Energy, and Natural Resources Subcomm. of the House Comm. on Gov't Operations*, 101st Cong., 1st Sess. (1989) [hereinafter *Government Operations Hearing*]. A brief article in one of the environmental newsletters, *State Role in Superfund Remedies, Enforcement, More Debated*, PESTICIDE & TOXIC CHEM. NEWS (Mar. 31, 1993) (labelling a March 24, 1993, meeting on the role of states in Superfund as "the first of its kind").

B. *The Federal Superfund Program: The Interviewees' Perspectives on the Program's Performance*

The prevailing view appears to be that the federal Superfund program has spent a great deal of money and accomplished very little.[43] President Clinton, in his February 18, 1993, address to a joint session of Congress captured this sentiment when he singled out the Superfund program for special criticism. "I'd like to use that Superfund to clean up pollution for a change and not just pay lawyers."[44] Similarly, the interviewees raised several concerns about Superfund and some of the policy choices it reflects.[45] Most of the interviewees' concerns focused on the issue of "How clean is clean?" More narrowly, this issue concerns whether, from a risk/benefit perspective, a need exists to clean up sites to the levels that CERCLA currently seems to contemplate; whether this country can afford such cleanups; and whether, even if the policy judgment mandates such cleanups, the technology is available to meet these goals.[46]

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43. *See supra* note 38 (setting forth representative literature). For a cynical viewpoint as to why many articles have been critical, see WILLIAM GREIDER, WHO WILL TELL THE PEOPLE: THE BETRAYAL OF AMERICAN DEMOCRACY 42-54 (1992). Greider suggests that once American industrial and financial interests lost the battles during the 1986 legislative debate on Superfund reauthorization, they engaged in "deep lobbying." *Id.* at 43. These interests financed research in an effort to "convince the uninformed that the law was not working," believing that "'[t]he nature of changes [in Superfund the next time it is considered for reauthorization] will depend on the emotional climate at the time of reauthorization and public perception of problems with the existing law.'" *Id.*

44. *Clinton's Economic Plan: The Speech*, N.Y. TIMES, Feb. 18, 1993, at A20, A21.

45. While a large number of groups have aggressively criticized various aspects of the Superfund program, *see supra* note 38, the author is unaware of any other non-EPA sponsored efforts to sample the views of the program's implementers (i.e., government officials) on the issue.

46. Many interviewees identified the issue of "How clean is clean?" as probably the most significant issue confronting Congress in the reauthorization process. The interviewees also noted that the "How clean is clean?" issue encompasses two sub-issues: (1) to what concentration of hazardous substances must contaminated media be remediated, and (2) what type of remediation is appropriate for these hazardous substances.

Similarly, EPA Administrator Carol M. Browner has called the question of "How clean is clean?" the "most vexing of all." Carol M. Browner, Administrator, U.S. Envtl. Protection Agency, *Statement Before the Subcomm. on Superfund, Recycling and Solid Waste Management of the Comm. on Env't and Pub. Works, U.S. Sen.*, at 18

(May 12, 1993) (on file with author). EPA Deputy Administrator Robert Sussman also recently said that the issue is "obviously at the heart of the debate" over Superfund. *EPA Lays Out Tight Schedule for Administrative Reforms to Superfund*, ENVTL. POL'Y ALERT, July 7, 1993, at 3.

As might be expected, one industry interviewee talked most forcefully on the issue of risk, stating: "In terms of the threat posed by sites, there is an absolute misconception. Very few pose a threat." He continued, on the topic of remedy selection: "The notion that you can clean sites is false. Most of the time you'll need to contain them." *See also* Keith Schneider, *New View Calls Environmental Policy Misguided*, N.Y. TIMES, March 21, 1993, at A1, A30. Schneider criticizes the "overaggressive endeavors" of the EPA to clean up hazardous waste sites that pose little threat at a cost of millions, or perhaps billions, of dollars in order to come into compliance with strict federal standards. *Id.* In reference to one commercial dump in Louisiana, Schneider asserts: "E.P.A. officials said they wanted to make the site safe enough to be used for any purpose, including houses -- though no one was proposing to build anything there. With that as the goal, the agency wanted to make sure children could play in the dirt, even eat it, without risk." *Id.*

OTA has noted that Superfund "was not created on the basis of lengthy, detailed studies which made the case for its need", but instead "was born out of something close to public hysteria ... ." COMING CLEAN, *supra* note 38, at 22. The authors of the OTA report asked whether the sites "pose a problem that justifies a multibillion dollar program?" and concluded that "[t]he evidence available now indicates to OTA the answer is yes." *Id.*

A citizen interviewee who, like OTA, disagreed with the industry interviewee on the issue of threat, nevertheless found some common ground on the issue of the achievability of CERCLA's cleanup goals with current technologies. The citizen interviewee discussed the limitations of current remedial technologies, stating that "for Superfund to thrive, a big improvement in remedial technologies is needed." Recent testimony from high-ranking EPA officials reflects that EPA recognizes the need for continued improvement, as evidenced by EPA's establishment of the Superfund Innovative Technology Evaluation ("SITE") Program in 1986. EPA designed the SITE program to encourage the development of innovative cleanup technologies. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S.ENVTL. PROTECTION AGENCY, PUB. NO. 9200.5-01B, THE SUPERFUND PROGRAM: TEN YEARS OF PROGRESS (1991) [hereinafter TEN YEARS OF PROGRESS]. Walter Kovalick, Director of the Technology Innovation Office of the EPA, has noted that several impediments act as barriers to expanded use of innovative technologies: (1) the absence of "credible" cost and performance data; (2) the absence of access to the data that does exist; (3) the lack of a sufficient number of development and training opportunities for innovative technologies; (4) the barrier created by present permitting regulations, which do not promote innovation; and (5) the "[f]ears of failure and 'paying twice' if a technology fails ... ." Walter W. Kovalick, Jr., Director, Technology Innovation Office, U.S. Envtl. Protection Agency, *Statement Before the House Comm. on Pub. Works and Transp.*, at 3 (Sept. 15, 1992) (on file with author). In *Coming Clean*, OTA makes several criticisms of the SITE program, including the criticism that "[c]onsiderable progress

Despite these and other concerns, the overall viewpoint of many of the interviewees is that the Superfund program has produced significant successes in recent years. Virtually every federal official, and several of the other interviewees as well, articulated a different vision of Superfund's current reality than that which appears to be the accepted truth today. Many of the interviewees believe that Superfund *currently* is working in the sense that hundreds of sites are being cleaned up, and the sites are being cleaned up by responsible parties.[47]

The federal interviewees readily acknowledged the difficulties that EPA experienced during the early Superfund years. They talked about the harmful impact those difficulties have had on the program's credibility.[48] These officials said, however, that over the last three or

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toward using more treatment technology has been made, but all too often it is not used." COMING CLEAN, *supra* note 38, at 143.

Despite this criticism and these barriers, EPA officials believe they have made considerable progress on this front. In his testimony, Mr. Kovalick testifies that "[a] total of 210 innovative treatment technology approaches have been selected in Records of Decision (RODs) at Superfund sites between 1982 and the end of Fiscal Year 1991." Kovalick, *supra* note 46, at 3. Administrator Browner states that Superfund has "spurred technological advances," and that "[t]hrough FY 1991, 42 percent of the technologies selected for use at Superfund sites were developed since the inception of Superfund." Browner, *supra* note 46, at 5-6. For a sweeping criticism of EPA's current approach to site cleanups under Superfund, see generally PROBLEMS WITH SITE CLEANUP PLANS, *supra* note 38.

47. Interviewees questioned the merits of some of the basic current policies of Superfund, for example, the appropriateness of the current approach to cleanup standards, and the efficiency of the Superfund process, including the issue of transaction costs. At the same time, these interviewees stated that despite these issues, the program is achieving considerable success. *Cf.* E. Donald Elliott, *Superfund: EPA Success, National Debacle?*, NAT. RESOURCES & ENVT., Winter 1992, at 11 ("[B]y and large EPA is now faithfully executing congressional mandates .... [T]he Superfund program is finally working the way Congress intended -- and therein lies the problem"). While detailed analysis of substantive aspects of the Superfund program is beyond the scope of this article, concerning the relative importance of these various issues, at least one industry group, the Hazardous Waste Cleanup Project (a coalition of eight major industry trade associations), appears to have focused its efforts to amend CERCLA on remedy selection, not on CERCLA's liability scheme, "on the theory that holding down ... costs ... would defuse the battle over who should pay for them ... ." *EPA Lays Out Tight Schedule for Administrative Reforms to Superfund*, ENVTL. POL'Y ALERT, July 7, 1993, at 4.

48. In *Ten Years of Progress*, EPA provides its perspective on its activities during the early years:

four years, things have changed. Cleanups are going forward and being completed[49] and the percentage of sites being cleaned up by potentially responsible parties ("PRPs") has increased dramatically.[50] They also

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> EPA spent most of the first decade of Superfund getting its house in order, and developing and enhancing the organizational structure and management systems necessary to get the job done, with cleanup progress accelerating by the end of the decade .... The early slow pace of the program stemmed, in part, from the difficulty of moving ahead before program policies, procedures, roles, and responsibilities were clearly defined. Today, the management foundation of Superfund is solidly in place and is continually being refined and enhanced.

TEN YEARS OF PROGRESS, *supra* note 46, at 33.

49. One federal official said that by the end of this year, 200 cleanups will be completed, that is, construction of the remedy will be complete. Recent EPA publications similarly paint a picture of accelerated progress. According to one recent EPA publication, as of January 1993, remedy construction had been completed at 155 sites. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVTL. PROTECTION AGENCY, ENVIRONMENTAL FACT SHEET: SUPERFUND PROGRESS (1993) [hereinafter ENVIRONMENTAL FACT SHEET]. EPA expects to have construction completed at 200 sites by the end of fiscal year 1993, and at 650 sites by the year 2000. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVTL. PROTECTION AGENCY, PUB. NO. 9200.1-12-3, SUPERFUND PROGRESS FALL/WINTER 1992 (1993) [hereinafter SUPERFUND PROGRESS]. According to a recent notice by EPA, remedy construction is deemed complete when one of the following requirements is fulfilled: (1) the necessary physical construction is finished, regardless of whether or not final cleanup levels have been met; (2) EPA has determined that no construction is necessary for implementation of the response action; or (3) the site qualifies for deletion from the NPL. 58 Fed. Reg. 12,142 (1993); *New Construction Complete Definition to Include Sites Deleted From NPL*, SUPERFUND REP., Mar. 10, 1993, at 19.

In her recent statement to Congress, Administrator Browner provided updated numbers on construction completions and other categories of Superfund work, stating that EPA has completed construction at 164 sites; that remedial investigations and feasibility studies ("RI/FSs") are underway or have been completed at almost 1200 sites; that remedies have been selected at 800 sites; that remedial designs are underway or have been completed at nearly 700 sites; and that remedial actions are underway or have been completed at nearly 500 sites. Browner, *supra* note 46, at 4. The various stages of the Superfund cleanup process, including RI/FSs, selection of remedies, design of the remedy, and construction of the remedy, are discussed in detail in Starfield, *supra* note 4, at 10,230-51.

50. Last year, according to EPA Administrator Browner, PRPs conducted more than 70% of the cleanups that were initiated (up from 32% in 1988). Browner, *supra* note 46, at 4. EPA also reports that 72% of cleanups initiated in FY 1992 were being conducted by PRPs. ENVIRONMENTAL FACT SHEET, *supra* note 49.

touted the removal program as an unpublicized success, as it has abated hundreds of imminent problems.[51]

Several state officials, despite their criticisms of certain features of the federal Superfund program, echoed the view that the federal Superfund program has changed for the better. One state official said that the "newer generation of cases is being pushed through quickly. ... EPA knows what it's doing. At this point [Superfund is] much less broke than it used to be." Another state official commented that "the [federal Superfund] program is basically sound now." A third state official said that he did not favor delegating the federal Superfund program to the states because in his view, among other reasons, "the program is working now."

The broader issue of the performance of the federal Superfund program is relevant to this more narrowly focused Article for two reasons. First, this Article's main purpose is to educate the reader on the issue of federal/state relations to help the reader make overall judgments on the appropriate future of the federal Superfund program. One purpose for raising this overarching issue in this Article is to suggest that the reader not automatically embrace the conventional wisdom but instead ask some hard questions and get some hard facts concerning the issue -- How well is Superfund working now? -- before making these judgments.

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51. CERCLA authorizes EPA to respond in two ways to hazardous substance sites -- "removal actions" or "remedial actions." EPA recently described the difference: "The *Removal Program* responds quickly to emergencies where hazardous materials are, or may be, released. The *Remedial Program* is dedicated to long-term cleanup of hazardous waste sites that pose the greatest threat to public health or the environment." OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, REP. NO. 9200.1-12B, SUPERFUND PROGRESS -- AFICIONADO'S VERSION 3 (June 1992) [hereinafter AFICIONADO'S VERSION]. EPA may institute removals, defined in CERCLA § 101(23), 42 U.S.C. § 9601(23) (1988), at any site determined to pose a threat to the public health or welfare or the environment, whether or not the site is on the National Priorities List ("NPL"). 40 C.F.R. § 300.415(b)(2) (1992).

Several interviewees from both the federal and state governments lauded the removal program. One state official said that the "removal program is the success story of the federal Superfund program" and that it should be "left alone ... regardless of what happens with the rest of CERCLA." An EPA regional official said that, if asked, one of his states would say "get rid of the Region except for the [removal] group." *See also* 90-DAY STUDY, *supra* note 30, at 4 ("the removal program is one of Superfund's biggest unsung success stories").

To date, over 2600 Superfund-financed removals have been completed at both NPL and non-NPL sites. ENVIRONMENTAL FACT SHEET, *supra* note 49; Browner, *supra* note 46, at 3.

Second, the issue of whether Superfund is producing significant results is relevant to the narrower issue of federal/state relations. To paraphrase one of the interviewees, in deciding whether to fix something, one must first decide whether it is broken, and if it is broken, how serious are the problems. Whether one concludes that radical change is needed in federal/state relations may well depend upon whether one believes that the Superfund program as a whole is fundamentally flawed and thereby warrants radical change. Further, one's view of the current program also may shape one's view as to the nature of any transition to a new federal/state relationship. Concerning this second point, discussed in more detail in Section III, many of the federal officials interviewed urged that if a decision is made to change the program dramatically by adopting a "delegation model," such a shift should include adequate transition to avoid losing the gains of the past several years. They note that such transition would minimize the disruption inherent in demobilizing the federal Superfund infrastructure that has taken twelve years to build and that they believe is now producing impressive results.

With this very brief history of the Superfund program, summary of some of the major issues currently confronting the federal government involving CERCLA, and introduction to the sentiments of some of the interviewees on the performance of the federal Superfund program in general, the Article now turns to the issue at hand -- the appropriate role for states in the federal Superfund program.

II. FINDINGS AND RECOMMENDATIONS[52]

This Section contains two basic sets of findings. Finding One contains an overall observation of the current state of the federal/state relationship. It provides a context for the findings and recommendations that follow. Findings Two through Seven identify specific recommendations to strengthen the current federal/state relationship.

A. *Finding One: The current federal/state relationship is a patchwork.*

CERCLA explicitly requires EPA to "promulgate regulations providing for substantial and meaningful involvement by each State in the initiation, development, and selection of remedial actions to be undertaken in the State."[53] EPA's Superfund regulations establish procedures for the creation of EPA/state Superfund Memoranda of Agreement ("SMOA").[54] SMOAs generally define the relationship between EPA and the state for both EPA-initiated and state-lead responses.[55]

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52. The federal government needs to resolve two sets of issues relating to these findings and recommendations. First, substantively, the federal government should decide what changes to make in the federal/state relationship. Second, procedurally, the federal government should select an appropriate vehicle for making such changes -- statutory change, regulatory change or change in agency practice.

EPA urged recently that it be given an opportunity to make administrative fixes to the program before statutory tinkering begins, but acknowledged that some legislative action may be needed. *Browner Says She'll Try Agency Fixes Before Making Legislative Recommendations*, Toxics L. Rep. (BNA), at 1506 (May 19, 1993); *EPA Focuses on Administrative Fixes for Reauthorization Process*, SUPERFUND REPORT, May 19, 1993, at 3 ("EPA has launched two workgroups -- one comprising Superfund stakeholders outside the agency and the other made up of agency officials -- to review options for reform .... . The latter will concentrate on ways to improve the program administratively ... ."). EPA and Congress will proceed on parallel tracks -- Congress will pursue the reauthorization process while EPA simultaneously seeks to improve the program through administrative measures. The likely outcome is a reauthorized statute whose scope to some extent will be affected by the success, or lack of success, of EPA's administrative fixes.

53. CERCLA § 121(f)(1), 42 U.S.C. § 9621(f)(1) (1988). *See also* 40 C.F.R. §§ 300.500-.520 (1992) (regulations regarding state involvement in hazardous substance response).

54. *See* 40 C.F.R. § 300.505 (1992).

55. *See id.*

CERCLA itself, as well as EPA's Superfund regulations and guidance, merely provides a procedure through which EPA and the states may define their relationship.[56] States differ dramatically in their interest in doing Superfund work and in their ability to perform such work. Thus, the current federal/state relationship on Superfund matters is a patchwork.

EPA's *50-State Study*[57] is probably the most complete reference on the capabilities and resources of all fifty states, the District of Columbia and Puerto Rico in the Superfund arena. As the study notes, assessing state capability is complicated due to the dynamic nature of state programs.[58] Nevertheless, the study reflects that the capabilities and resources of states vary dramatically.

For example, whereas one-fifth of the states have dedicated more than one hundred staff personnel to Superfund matters, another one-fifth have allotted fewer than ten people to this effort.[59] Similarly, states differ significantly in their enforcement authority. The authors of the *50-State Study, 1991 Update* note that under CERCLA liability is strict, and joint and several, but that "[t]his is not the case with many of the State programs."[60] Thirty-six states have adopted a strict liability standard, but fourteen states, the District of Columbia and Puerto Rico have not.[61] Finally, the states differ with regard to their financial commitment. Four states have more than $50 million in fund balances available to them, but thirteen states have less than $1 million available.[62] Other studies of state capabilities similarly have found significant differences between and among states.[63]

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56. *See id.*
57. *See* 50-STATE STUDY, 1991 UPDATE, *supra* note 5.
58. *Id.* at 7.
59. *Id.* at 66.
60. *Id.* at 32.
61. *Id.* at 102.
62. *Id.* at 22.
63. *See, e.g.*, STATE CLEANUP STATUS, *supra* note 42. The U.S. General Accounting Office ("GAO") noted that "[w]hile most states have accomplished few or no cleanups, some have ... achieved considerable results .... Progress in long-term cleanup activity is concentrated in a few states. About four-fifths of the ... completed cleanups were done by six states. A third of the reporting states have not completed any cleanups." *Id.* at 3-4. Later in its report, GAO states more generally that "[o]ur review showed that states are not all equally prepared to assume responsibility for the cleanup of ... NPL sites." *Id.* at 63. *See also Government Operations Hearing, supra* note 42, at 60, 67 (prepared statement of Jonathan Z. Cannon, Acting Assistant Administrator, Office

EPA regions also differ in their philosophies toward state involvement. For example, based on the interviews, EPA's regions apparently follow different approaches in involving states in federal Superfund enforcement efforts. Although the regions agree that CERCLA authorizes states to serve as the enforcement lead for National Priorities List ("NPL") sites,[64] interviewees from one EPA region said that they do not sign cooperative agreements that give states the enforcement lead at NPL sites. In contrast, other EPA regions are prepared to allow states to take the lead.

Any restructuring of the system, such as authorizing states to select remedies or authorizing states to commit federal Superfund money towards remedies without EPA concurrence, needs to account for the reality of this patchwork relationship.

B. *Finding Two: The federal government should actively seek to "leverage" its own Superfund resources by doing what it can to strengthen state Superfund programs.*

The federal Superfund program today only addresses a small percentage of the hazardous waste sites in this country that need attention. The federal government focuses the vast majority of its activity on sites that are listed on the federal NPL, the EPA generated list of sites warranting long-term remedial evaluation and response.[65] As of March 31, 1992, the NPL listed 1275 sites.[66] To put this number into context, estimates of the total number of sites requiring cleanup range from 28,000 to 450,000.[67] As many interviewees stressed, the

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of Solid Waste and Emergency Response, U.S. Envtl. Protection Agency) (noting that the *50-State Study*, which was completed "in order to provide a comprehensive overview of the current status of development by States of ... capabilities to address Superfund-type hazardous waste problems" indicates that state capabilities vary widely).

64. *See* CERCLA § 121(f)(1), 42 U.S.C. § 9621(f)(1) (establishing minimum level of state involvement); *see generally* 40 C.F.R. § 300.425(b) (1992) (establishing the NPL as an EPA-generated list of sites warranting remedial evaluation and response)

65. 40 C.F.R. § 300.425(b); Starfield, *supra* note 4, at 10,228.

66. *See* AFICIONADO'S VERSION, *supra* note 51, at 4. EPA expects this number to grow to more than 2000 sites by the end of the century. *Id.* In its 1989 report, *Coming Clean*, OTA projects that the NPL could ultimately include more than 10,000 sites. COMING CLEAN, *supra* note 38, at 125.

67. STATE CLEANUP STATUS, *supra* note 42, at 3; *Government Operations Hearing*, *supra* note 42, at 2 (opening statement of Chairman Mike Synar) ("States have already identified 28,000 hazardous waste sites in need of attention and the number may

federal Superfund program represents only the tip of the iceberg in terms of the hazardous waste site problem in this country.[68]

States have developed their own staffs, sources of funding and expertise to address many of these Superfund sites.[69] As of December 2, 1991, states employed a total of 3656 people on Superfund matters and had more than $2.2 billion in unobligated funds and authorized bonds available for Superfund projects.[70] The federal government should restructure the federal Superfund program to maximize the effectiveness of these state Superfund programs.[71]

The federal government should take two concrete steps to

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ultimately grow as high as 130,000 to 450,000 nationwide"). New York State's Department of Environmental Conservation projects that at least 700 sites will require remediation in that state alone. REPORT TO THE GOVERNOR AND THE LEGISLATURE: 7TH ANNUAL EVALUATION OF THE NEW YORK STATE HAZARDOUS WASTE SITE REMEDIATION PROGRAM, STATE SUPERFUND MANAGEMENT BOARD 1 (Jan. 1, 1993).

68. *See also Governors to Develop Superfund Reauthorization Position*, SUPERFUND REP., Feb. 24, 1993, at 7-8 ("The [S]uperfund program handles less than 10% of the hazardous waste cleanups. The remainder are conducted under other federal programs or state superfund programs"); COMING CLEAN, *supra* note 38, at 13 ("Superfund is just the visible tip of an expanding national pyramid of cleanup programs"). As EPA itself recognized in 1991 in *Ten Years of Progress*, "[a]fter 10 years of experience, the most important lesson that all Superfund participants have learned is that the program faces a workload stretching well into the next century." TEN YEARS OF PROGRESS, *supra* note 46, at 36.

69. *See generally* 50-STATE STUDY, 1991 UPDATE, *supra* note 5.

70. *Id.* at 5, 22.

71. Because of these thousands of sites and the existence of state Superfund programs, several federal official interviewees urged that the success of the federal Superfund program be judged by more than EPA statistics alone. They said that the existence of the federal Superfund program has provided leverage to facilitate cleanups at state Superfund sites, and the program similarly has provided the impetus for thousands of cleanups conducted by private parties without any governmental involvement whatsoever.

These interviewees are right. EPA and others should develop a better understanding of the accomplishments of these state programs and a better grasp of the thousands of cleanups that Superfund has induced private parties to perform without any governmental involvement. One high ranking EPA official told the author that EPA needs to integrate better EPA and state data systems so that the government can develop information concerning the total amount of cleanup and other activity occurring under government auspices.

accomplish this result.[72] First, the federal government should give states the authority to serve as the "gatekeepers" for the federal NPL.[73] This change would enable states to use the NPL as the "guerilla in the closet" to induce liable parties to cooperate with states under state Superfund programs, thereby eliminating the need for the federal government to address such sites. Second, the federal government should use the federal Superfund law to improve the efficiency of state programs by extending CERCLA's section 121(e) permit exemption requirement to cleanups conducted under capable state programs.[74]

1. *The federal government should give states the authority to serve as the "gatekeepers" for the National Priorities List.*

One interviewee noted that the federal Superfund program is viewed as creating "so much jeopardy" that "people treat it like the plague."[75] The federal government should structure the federal program to make it possible for states to warn responsible parties that if they do not cooperate with the states' program, their sites will go on the NPL, by giving states control over the listing of sites on the NPL.[76] Another federal interviewee who supported this approach said that EPA has used

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72. The following suggestions for restructuring the federal Superfund program to increase the leverage of state Superfund programs assume that the federal government retains the current structure of two sets of sites -- a relatively small number of sites on the federal list and a large number of other sites needing attention. One framework for handling hazardous waste sites would entail eliminating the current "two list" framework, and instead creating a single comprehensive list of sites needing investigation and cleanup. *See* discussion *infra* part III.C.

73. *See generally supra* note 64 (discussing the function of the NPL).

74. CERCLA § 121(e)(1), 42 U.S.C. § 9621(e)(1) (1988), provides in pertinent part: "No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section." *See also* 40 C.F.R. § 300.400(e)(1992); 55 Fed. Reg. 8688-92 (1990); Starfield, *supra* note 4, at 10,234.

75. Commentators have used different words to convey the same message: "Presence on the NPL is often the economic death knell for a property because it renders the land essentially unmarketable and foreshadows years of costly work." Kass & Gerrard, *supra* note 34, at 4.

76. States do not currently have this leverage. For example, EPA does not need state concurrence to list a site on the NPL. 40 C.F.R. § 300.425(e)(2) (1992). Further, states may nominate a site for the NPL, but EPA retains full control over whether it is listed. 40 C.F.R. § 300.515(c). In contrast, EPA cannot delete a site from the NPL until the affected state concurs in the deletion. 40 C.F.R. § 300.425(e)(2).

the NPL to great advantage to leverage cleanups at Resource Conservation and Recovery Act ("RCRA") sites.[77]

EPA requested comment on two alternative approaches to deferring sites to states in its 1988 proposed revisions to the 1990 National Contingency Plan ("NCP").[78] According to one of the primary authors of this regulation, deferral received the most public comments of any concept in the proposed regulations.[79] EPA responded to this pressure by disbanding the work group it had established to address the matter and putting the issue on the back burner.[80] In short, EPA deferred addressing the deferral issue.

In its evaluation, the United States General Accounting Office ("GAO") appeared to urge a "go slow" approach to deferral, based in part on the variable capabilities of state Superfund programs.

> Most states' ability to effectively clean up large, complex

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77. In addition to its function as a "cradle-to-grave" management scheme, *see supra* note 31, RCRA also authorizes EPA to require parties to clean up releases of hazardous wastes under certain circumstances. *See, e.g.*, RCRA §§ 3004(u)-(v), 3008, 42 U.S.C. §§ 6924(u)-(v), 6928 (1988). According to several federal interviewees, EPA induces parties to perform these remedial obligations under RCRA by threatening to treat the facility as a federal Superfund site. A related benefit of allowing states to control the listing of NPL sites is that it would reduce duplication of effort by ensuring that the federal government process was not applied to, and federal resources were not spent on, a site where state resources already were involved. Several interviewees urged this change. One official urged that EPA "make the 'D' [deferral] word legal." In other words, if a state program is capable of handling a site, the state should be allowed to handle the site, and the state should not be required to go through the process of scoring and listing a site on the NPL.

In its report, GAO lists other benefits of deferral which states also identified: (1) reduced delays in starting cleanups; (2) expedited cleanups; (3) encouragement of PRPs to clean up sites; (4) less expensive cleanups; and (5) allowing states to act on their own policies and requirements. STATE CLEANUP STATUS, *supra* note 42, at 61-62.

78. 53 Fed. Reg. 51,415-22 (1988). EPA requested comment on expanding the deferral of sites to other federal authorities, as well as to states. *Id.*

Section 105 of CERCLA mandates the maintenance of the NCP. 42 U.S.C. § 9605. EPA implements the NCP by regulation. *See* 40 C.F.R. §§ 300.1-.1105. "The purpose of the ... [NCP] is to provide the organizational structure and procedures for preparing and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants." *Id.* § 300.1.

79. Starfield, *supra* note 4, at 10,242; *Government Operations Hearing*, *supra* note 42, at 67 (prepared statement of Jonathan Z. Cannon).

80. *Id.*

> hazardous waste sites has not been demonstrated. For this reason and to preserve fair, consistent treatment of responsible parties and the public, GAO believes that EPA should proceed with deferral of Superfund sites only if it can ensure that state cleanups of deferred sites are at least as protective as Superfund requires.[81]

GAO concluded:

> Our review showed that some states have large hazardous waste site programs and considerable experience with site cleanup. Some form of deferral may be workable. However, for several reasons we believe that any deferral policy should have stronger controls over cleanup than the deferral proposal establishes. First, most of the 50 states have little experience with the cleanup of hazardous waste sites. Several of the states we visited had new programs, small staffs, and not enough funds to clean up many sites without support from responsible parties. The ability of most states to clean up hazardous waste sites independently has not been demonstrated. A recent EPA Inspector General report criticized states for inadequately performing their Superfund site "lead" responsibilities.[82]

In sum, the primary concerns GAO articulated in counseling restraint concerning deferral are: (1) Many states lack the financial and other capabilities to handle sites on their own; and (2) as a result, deferral may result in delay in remediating sites or in inadequate remediation.[83] GAO also believed that EPA's 1988 deferral proposal

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81. STATE CLEANUP STATUS, *supra* note 42, at 3.

82. *Id.* at 68.

83. According to the GAO, deferral should be considered only when the state makes adequate assurances that it has the regulatory authority, the personnel, and the funding to conduct a CERCLA style cleanup. Even then, deferral should be subject to strict EPA oversight to ensure that the site is remediated in a timely manner and is consistent with the NCP. STATE CLEANUP STATUS, *supra* note 42, at 59-69; *see also Government Operations Hearing*, *supra* note 42, at 36 (testimony of Richard L. Hembra); COMING CLEAN, *supra* note 38, at 13, 62, 197, 200-01, 214-15. OTA criticized deferral, stating that "[t]here is no evidence to suggest that programs other than Superfund are more

failed to adequately define the nature and extent of EPA oversight.[84]

GAO's concerns relating to deferral are legitimate. Allowing such concerns to derail the entire effort to defer sites in situations for which capable states are willing to handle them, however, is misguided and counterproductive. This strategy of inaction, which has now been in place for several years, is contrary to the federal government's ultimate objective in terms of the states' role in the Superfund program. Given the enormous scope of the hazardous waste site problem and the federal government's resource constraints, the federal government should be maximizing the tools that state governments have to accomplish timely and effective cleanups.

Accordingly, the federal government should change its policy to allow deferrals. In effecting this change, the federal government should address the issues concerning state capability that GAO raises. The federal government should not automatically allow every state to control listing of sites on the federal NPL. Instead, the federal government should include safeguards to ensure that vesting states with this "gatekeeper" responsibility does not delay unduly remediation of sites or make inadequate efforts at remediation.

One safeguard the federal government should include is that it should allow only states with "capable" programs to serve as gatekeepers.[85] A second, complementary safeguard is to make deferral a public process. Requiring public accountability at various stages in the process, for example, at the time of the initial decision to defer a site, at

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efficient, i.e., provide quality cleanup at lower cost to the public." *Id.* at 201. For additional information on the issue of deferral, see generally Starfield, *supra* note 4, at 10,242.

A report that a contractor, CH2M Hill, prepared for EPA in 1991 similarly raises concerns regarding states' financial capability. CH2M Hill projected that by the year 2000 states would have obligated a total of almost $1.2 billion merely for operation and maintenance ("O & M") at NPL sites. This amount does not include states' 10% cost share for NPL sites, or state expenditures for non-NPL sites. States' O & M financial obligations must be considered in any evaluation of state capability to contribute to the remediation of NPL or non-NPL Superfund sites.

84. STATE CLEANUP STATUS, *supra* note 42, at 63, 67-68.

85. In its report, GAO lists four possible criteria for evaluating state programs: (1) a proven record of cleanup experience with complex, extensively contaminated sites; (2) a record of successfully negotiating with PRPs; (3) adequate staff and other resources to clean up sites with government funds; and (4) adequate oversight of PRP sites. STATE CLEANUP STATUS, *supra* note 42, at 65. *See infra* note 116 (discussing eight possible criteria for determining which state programs are "capable").

periodic intervals in the investigation process and at the completion of major milestones such as the Remedial Investigation/Feasibility Study ("RI/FS") and Record of Decision ("ROD"), should enhance state performance.[86] In a third aspect of this proposed change in the Superfund program, EPA also should retain a second level "gatekeeper" function, that is, EPA must concur that a site poses a risk of significant magnitude to warrant federal attention and listing on the NPL.[87]

In sum, the federal government should actively encourage deferral to capable and interested states, rather than allow issues relating to the

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86. In another context, the public accountability created by the toxic release inventory ("TRI") program, which requires companies that generate more than a certain volume of specific toxic substances to report these releases publicly, is reported to have contributed to a significant reduction in the generation of these materials. Emergency Planning and Community Right-to-Know Act, 42 U.S.C.A. §§ 11,001-11,050 (West Supp. 1993); Charles L. Elkins, *Toxic Chemicals, the Right Response*, N.Y. TIMES, Nov. 13, 1988, at F3 (stating that it was only in the wake of the TRI program that many companies "discover[ed] the extent to which they [were] discharging potentially harmful substances -- not only as a result of plant accidents, but during routine daily operations as well," and citing as an example that Monsanto had pledged to reduce its emissions into the air by 90% by the end of 1992). Given the large number of sites the logistics of such an approach, including such issues as whether all non-NPL sites should proceed through a formal public deferral process or whether some prioritization of sites should occur first with only the higher priority sites proceeding through this process, need to be evaluated and resolved.

Citizen interviewees and GAO favored more federal oversight of non-NPL site work to ensure that states move the sites in a timely way, which the citizen interviewees believe are more readily subject to political pressure from industry. One federal official indicated his view that because of resource limitations it is unrealistic to expect EPA to monitor non-NPL sites. As a general matter, and with respect to Superfund in particular, the federal government needs to develop newer, better ways of measuring state performance. The federal government should maximize the number of government employees on the front lines handling cases or sites and minimize the number of employees engaged in oversight activities. One strategy would be to maximize the use of creative approaches, such as public disclosure, to strengthen state performance, and to minimize resource-intensive, case-specific review and oversight.

87. EPA currently possesses such authority, with one qualification: CERCLA authorizes states to designate their "highest priority facility" for NPL listing, and EPA must list such facilities on the NPL, regardless of their hazard ranking score. CERCLA § 105(a)(8)(B), 42 U.S.C. § 9605(a)(8)(B) (1988); 40 C.F.R. § 300.425(c) (1992). One component of this issue that the federal government should consider is whether its function as the second level gatekeeper should be to exercise de novo review, or whether it should give substantial deference to states' judgments when the states have demonstrated their capability to make sound decisions.

capability of some states to serve as a road block to enhanced state efforts to clean up sites.[88]

2. *The federal government should use the federal Superfund law to improve the efficiency of state programs by extending the section 121(e) permit exemption requirement to cleanups conducted under capable state programs.*[89]

Ordinarily, actions to treat or dispose of hazardous substances require permits. For example, constructing a landfill for the disposal of hazardous waste requires a permit under RCRA.[90] The purpose of such a permit requirement is two-fold.[91] First, the requirement ensures that the appropriate environmental regulatory agency has reviewed the proposed operation. The agency has determined that the operation meets regulatory requirements and therefore will not present an unreasonable risk to public health or the environment.[92] Second, the permit requirement provides a forum for the public to participate in the process.[93] The downside to the permit process is that it takes time and

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88. In a June 1993 report, EPA acknowledges the appropriateness of using the NPL as a tool to strengthen states' efforts to clean up sites under state Superfund programs. EPA's proposed strategy, however, appears to allow less leverage to states than states would have as gatekeepers to the NPL. Under EPA's proposed approach, the decision concerning how best to handle non-NPL sites would be a mutual one involving both EPA and the states, rather than a unilateral one. EPA would only cede control over certain types of non-NPL sites, those sites that are low or medium priority NPL-caliber sites. U.S. ENVTL. PROTECTION AGENCY, SUPERFUND ADMINISTRATIVE IMPROVEMENTS, FINAL REPORT 33-36 (June 23, 1993). EPA's administrative shift, while a step in the right direction, falls short in allowing states to maximize their leverage to induce PRP cleanups of non-NPL sites that the threat of NPL listing creates.

89. *See supra* note 74 (setting forth CERCLA permit requirement).

90. RCRA § 3005(a), 42 U.S.C. § 6925(a) (1988 & Supp. III 1991).

91. Permits play an important role in the environmental regulatory scheme. Because EPA operates mainly through legislative rules, permits serve to "apply the Agency's legislative rules to individual pollution sources and hazardous waste management facilities." 1 LAW OF ENVTL. PROTECTION, ENVTL. LAW INSTITUTE § 3.06[1], at 3-44 (Sheldon M. Novick, ed. 1993). Not only does the permit process clearly set out each discharger's obligations, but the process also makes enforcement of these defined obligations a much easier task. *Id.* Presently, five EPA-administered statutes incorporate permitting systems. *Id.* at 3-45.

92. *Id.*

93. *See, e.g.*, N.Y. COMP. CODES R. & REGS. tit. 6 § 624.3-5 (1992) (providing for a public hearing process).

delays cleanup.[94]

CERCLA explicitly frees EPA from having to obtain permits for the on-site remedies it selects under Superfund.[95] For example, if a Superfund remedy involves building an on-site treatment facility, no permit is needed, even though that facility ordinarily would require a RCRA permit. The remedy must meet all of the substantive requirements of such a permit, and the government must provide equivalent opportunities for public input into the decision-making process, but the party building the facility need not go through the actual permit process.[96]

The rationale for this approach is that the CERCLA cleanup process is the functional equivalent of the permit process and provides adequate assurance that the government is satisfied with the proposed operation.[97] The approach also ensures sufficient opportunity for the

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94. As one state official interviewee said, the need for permits hinders cleanups. He said that the RCRA permit process takes approximately two and a half years. He further noted that the permit process and remediation are not a good fit. Permits are designed for facilities that will remain in operation for years while remediation often involves short-term operation. In addition, ordinarily, a choice of location is involved for a permit, while in the remediation context no choice exists. He suggested a need for balance and a variance procedure to address these factors. *See also* OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVTL. PROTECTION AGENCY, OSWER DIRECTIVE NO., 9355.7-03, PERMITS AND PERMIT "EQUIVALENCY" PROCESSES FOR CERCLA ON-SITE RESPONSE ACTIONS 4 (1992) [hereinafter PERMITS GUIDANCE]; Starfield, *supra* note 4, at 10,234.

95. CERCLA § 121(e)(1), 42 U.S.C. § 9621(e)(1); 40 C.F.R. § 300.400(e) (1992). *See supra* note 74.

96. *Id.*; *see also* Starfield, *supra* note 4, at 10,234 n.133 & n.137.

97. As EPA notes in the preamble to the 1990 NCP:

> CERCLA actions should not be delayed by time-consuming and duplicative administrative requirements such as permitting, although the remedies should achieve the substantive standards of applicable or relevant and appropriate laws .... EPA's approach is wholly consistent with the overall goal of the Superfund program, to achieve expeditious cleanups, and reflects an understanding of the uniqueness of the CERCLA program, which directly impacts more than one medium (and thus overlaps with a number of other regulatory and statutory programs). Accordingly, it would be inappropriate to formally subject CERCLA response actions to the multitude of administrative requirements of other federal and state offices and agencies.

public to participate in this process.[98] The same rationale for exempting cleanup decisions from the permit process applies to "capable" state programs. Accordingly, the federal government should extend this exemption to states that it deems capable of selecting such remedies and that have adequate procedural safeguards in place, such as the right of citizens to participate fully in the remedy selection process.[99]

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55 Fed. Reg. 8756 (1990); *see also* Starfield, *supra* note 4, at 10,234. The interpretation that cleanups need not comply with the administrative requirements of other laws "was historically based on the position that CERCLA actions must be allowed to proceed expeditiously and that compliance with administrative and procedural provisions would slow down CERCLA actions. Moreover, the NCP sets out a detailed set of procedures of its own that CERCLA actions must follow; these render unnecessary the procedures of other environmental programs". *Id.*

98. *See* CERCLA § 117, 42 U.S.C. § 9617 (1988).

99. While some state programs include provisions similar to CERCLA § 121(e), *see, e.g.*, N.Y. COMP. CODES R. & REGS. tit. 6, § 375-1.7 (1992), others may not. EPA indicates its view that this exemption does apply to states under certain circumstances, primarily if a state has "lead" agency status and is "operating pursuant to a contract or cooperative agreement executed pursuant to CERCLA section 104(d)(1), under which EPA selects (or must approve) the remedy." PERMITS GUIDANCE, *supra* note 94, at 2-3. To the extent that this guidance limits the state-selected remedies to which this exemption from permitting applies, the federal government should expand this exemption so that it applies to any state-selected remedial action when EPA has determined that the state is "capable" and has adequate procedural protections for citizen input.

Several states, including New Jersey and Massachusetts, recently have instituted voluntary cleanup programs that, to some extent, are distinct from their Superfund programs. *See, e.g.*, N.J. ADMIN. CODE tit. 7, § 26C (1993). Interviewees believed that the federal government should revamp the federal Superfund program to give these states leverage to encourage the voluntary cleanup of these sites by giving the state control over the listing of these sites on the NPL. The issuing of a permit exemption would depend on whether the remedial process for these sites is the functional equivalent of the permit process.

In addition to these options for restructuring the federal Superfund programs to strengthen state Superfund programs, the obvious suggestion of strengthening state programs exists through the provision of direct federal resource support. This suggestion makes sense if used selectively to build state programs that are more effective than EPA strengthening its own program. EPA currently provides non-site-specific funding to states to build state Superfund programs, known as the Core program. STATE INVOLVEMENT, *supra* note 40, at 25 ("The Core Program enables EPA to fund non-site-specific activities that are essential for states to administer their Superfund program and to play an active role in site-specific cleanups"). *See also Government Operations Hearing*, *supra* note 42, at 63 (prepared statement of Jonathan Z. Cannon).

C. *Finding Three: The federal government should actively seek to "leverage" its own resources by doing what it can to encourage greater state involvement in the federal Superfund program.*

In addition to making changes to the federal Superfund program that will strengthen state Superfund programs, the federal government should take steps to increase state involvement in the federal Superfund program itself.

Both state interest and capability in Superfund matters have increased in recent years.[100] For example, states already play an active role in the preliminary stages of investigating federal Superfund sites. States conduct more than sixty percent of preliminary assessments and more than thirty percent of site investigations.[101]

EPA should continue to help build this state capability and take advantage of it by increasing the states' role in the federal Superfund

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100. 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 5-8 & Table V-1. The authors of this study report that, comparing the 1989 and 1990 data concerning expansion of state programs with the 1991 data, "the States' programs have continued to develop, but ... the changes are less dramatic and more incremental than was the case in the late 1980s." *Id.* at 5.

101. TEN YEARS OF PROGRESS, *supra* note 46, at 31.

CERCLA activity at a site begins with a two-phase evaluation consisting of a preliminary assessment ("PA") and a site inspection ("SI"). 40 C.F.R. § 300.500 (1992). A PA is undertaken at a site when (1) the site has been placed on the CERCLIS database; or (2) a release or threat of release that is eligible for CERCLA response has occurred at the site. 40 C.F.R. § 300.420(b)(1), (5)(iv)(A)-(B). EPA has made it a policy to conduct a PA at a site within one year of its inclusion on CERCLIS. *See* TEN YEARS OF PROGRESS, *supra* note 46, at 11. The PA involves identifying the nature and source of the release, exposure pathways, and potential exposure targets through historical searches, and a regulatory file review. 40 C.F.R. § 420(b)(2). Where information gathered during the PA indicates that further investigation of the site is warranted, an SI is conducted. *Id.* § 420(b)(4)(iii). The SI consists of more detailed on and off site investigation, sampling, and sample analysis. *Id.* § 420(c)(2).

States have played a less prominent role in conducting remedial investigation/featuring studies. "[T]he purpose of the remedial investigation/feasibility study (RI/FS) is to assess site conditions and evaluate [remedial] alternatives to the extent necessary to select a remedy." *Id.* § 300.430(a)(2). In the preliminary assessments of the RI/FS, states led the process between 1980 and 1990. The individual states' involvement and authority varied significantly between EPA regions -- from 10% in Region 7 to 30% in Region 2. *See* U.S. ENVTL. PROTECTION AGENCY, SUMMARY OF STATE INVOLVEMENT IN THE SUPERFUND PROGRAM (1990). On average, states conducted approximately 16% of the RI/FSs during this ten-year span. *See* TEN YEARS OF PROGRESS, *supra* note 46, at 31.

program, that is, EPA should be leveraging its resources by bringing states into the federal Superfund program as much as possible.[102]

Based on the interviews, a primary area in which EPA historically has limited state involvement is remedy selection. In the NCP, EPA indicates that as a matter of policy, it will make all the remedy selection decisions for federal NPL sites.[103] Some interviewees suggested that

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102. EPA has acknowledged the need to include states to a greater extent in the federal Superfund program:

> EPA recognizes that many more sites need to be addressed than present CERCLA resources can accommodate; by deferring some problem sites to the States, EPA believes more overall response actions can be accomplished more quickly, and EPA can direct its resources to sites that otherwise would not be addressed.

53 Fed. Reg. 51,418 (1988).

103. 40 C.F.R. § 300.515(e); *see also* 55 Fed. Reg. 8783 (1990) ("EPA believes ... that it is not appropriate at this time to turn over the final decision-making authority on remedy selection to states. ... EPA believes that it should retain primary responsibility for the federal Superfund program. ... Further, keeping the final responsibility for remedy selection within EPA (rather than dividing it among the 50 states and EPA) furthers the goal of ensuring consistency among remedies implemented at sites."). *But see* Starfield, *supra* note 4, at 10,242-43 (discussing the predominant sentiment among states that EPA should delegate the remedy selection power to the states rather than retaining this power itself). For arguments related to the appropriate role of states under CERCLA and the NCP, see Brief for the Respondent at 111-23, Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993) (No. 86-1096); Amended Joint Opening Brief of Petitioners at 93-120, Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993) (No. 86-1096); Joint Reply Brief of Petitioners at 43-53, Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993) (No. 86-1096).

The one exception to EPA's insistence on retaining ultimate remedy selection authority involves non-Fund-financed, state lead enforcement sites (i.e., sites that states will manage and for which states will not require federal funds to accomplish remediation). 40 C.F.R. § 300.515(e)(2)(i) (1992) (the author was unable to determine how many sites have been addressed under this section). An EPA guidance document provides that EPA and states should enter into site-specific agreements concerning such sites that specify schedules for the state to meet in addressing the site. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVTL. PROTECTION AGENCY, OSWER DIRECTIVE NO. 9831.9, QUESTIONS AND ANSWERS ABOUT THE STATE ROLE IN REMEDY SELECTION AT NON-FUND-FINANCED ENFORCEMENT SITES 3 (Apr. 18, 1991) [hereinafter QUESTIONS AND ANSWERS]. To the best of the author's knowledge, no such agreements have been consummated. Telephone conversation with Jan Baker, Special Assistant, Office of Emergency and Remedial Response, U.S. EPA (July 14, 1993). Based on information drawn from EPA's CERCLA Information System

EPA may be slowly starting to move away from this policy. However, EPA should be much more aggressive in its integration of interested and "capable" states into the federal Superfund program. The agency's goal should be to have such states assume responsibility for entire sites, from site investigation through remediation, so that EPA can turn to sites for which states are not in a position to play a significant role.

To summarize Findings Two and Three, the federal government's underlying philosophy towards the federal/state relationship needs to be based on the reality that EPA cannot handle on its own the vast number of sites that currently need attention. The federal government's fundamental objective in terms of the federal/state relationship should be to leverage federal resources by (1) structuring the federal program to make state programs as effective as possible and (2) integrating states and state resources as much as possible into the effort to address federal Superfund sites. EPA should be soliciting actively state involvement in this work and be helping to develop states' capabilities to conduct it.[104]

("CERCLIS") database, *see generally infra* Section II.G.4, states have overseen a total of 36 PRP-funded RI/FSs with no federal funding, and a total of 12 PRP-funded remedial designs and 12 remedial actions with no federal funding since the program's inception in 1980.

104. The two suggestions made in the text to improve in this area -- taking actions to strengthen state programs' handling of non-NPL sites and better integrating states into the federal program involving NPL sites -- assume that Congress will retain the federal NPL. The NPL is an artificial construct, a subset of the sites throughout the country that require attention. Consequently, the existence of the NPL creates a need to divide the universe of sites into two subsets: NPL sites and non-NPL sites. The suggestions in the text relate to improved federal use of state resources within this construct.

Alternative Three, *see supra* Section III.C, embodies a more radical approach to leveraging federal resources through greater use of state resources. This alternative involves dismantling the existing NPL approach, developing a comprehensive list of sites that need ttention, and dividing these sites between EPA and the states.

D. *Finding Four: The federal government should streamline the Superfund process to improve efficiency in the use of federal and state resources.*[105]

The federal government should structure the federal Superfund program to avoid squandering the additional resources gained for the program through state involvement. Indeed, to the extent the federal government is successful in helping to strengthen state capability and in convincing states to participate actively in the federal Superfund program, EPA and state officials should not lose these gains by spending significant amounts of time duplicating efforts or double-checking each other's work. To the maximum extent possible, the governments should be working as a team, with functions and responsibilities clearly delineated and with a minimal amount of overlap built into the system. The program should be designed to facilitate a more efficient,

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105. While beyond the scope of this Article, many people have called for streamlining, or compressing, the current several-year time frame to investigate and clean up sites. Administrator Browner has acknowledged this criticism, and stated that the "average time from an initial RI/FS to completion of a remedial action project at a Superfund NPL sites is 10 years." Browner, *supra* note 46, at 7.

The recently proposed Superfund Accelerated Cleanup Model ("SACM") approach (described in a publication by the OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVTL. PROTECTION AGENCY, DIRECTIVE NO. 9203.1-03, GUIDANCE ON IMPLEMENTATION OF THE SUPERFUND ACCELERATED CLEANUP MODEL (SACM) UNDER CERCLA AND NCP (July 7, 1992)) is one effort EPA has made to streamline the overall program. Another recently reported example of the federal government's effort to streamline the federal Superfund program is the recent "launch[ing] [of] a major effort" by the Agency for Toxic Substances and Disease Registry ("ATSDR") to streamline the assessment of public health hazards at Superfund sites. ENVIRONMENTAL POLICY ALERT, May 26, 1993, at 16.

The SACM model was of concern to several state officials, because the model has the potential to blur the lines of responsibility between states and EPA, and therefore disrupt relations between the two governments. The SACM directive fails to discuss the appropriate state role in the "SACM model." One state official noted that to the extent that EPA intends to use its removal authorities to address sites that states previously would address, or to deal with parts of sites that states previously would address, the SACM model obviously carries with it the seeds for major disruptions in federal/state relations. One federal interviewee responded to this concern by saying that SACM is not intended to expand the universe of sites that EPA addresses.

streamlined and less hierarchical working relationship.[106]

Several interviewees called for a fundamental shift in the federal/state partnership at sites. Currently, the relationship at most state sites is one of "lead agency" and "support agency."[107]

This system inherently creates the likelihood of redundant effort and inevitably leads to conflicts. For example, for the vast majority of sites at which a state serves as the "lead agency," the state enters into a "cooperative agreement" with EPA under which EPA funds the state's performance of its responsibilities.[108] The regulations provide that a cooperative agreement is a "legal instrument EPA uses to transfer money ... to a recipient to accomplish a public purpose in which *substantial [EPA] involvement is anticipated during the performance of the*

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106. Administrator Browner has discussed the overlap in responsibilities inherent in the current federal/state relationship:

> The EPA/State relationship has been strained in some areas. The law assures state involvement in all aspects of Superfund .... The law also requires cleanups to meet the requirements of state environmental laws more stringent than federal requirements. Moreover, states are responsible for paying a percentage of the cost of remedial actions .... Because so much responsibility -- and cost -- is shared, the federal and state governments sometimes disagree on issues such as remedy selection, enforcement, and long-term state operation and maintenance costs at Superfund sites.

Browner, *supra* note 46, at 8.

In the 1986 SARA Amendments, Congress significantly expanded state involvement in the federal Superfund program, "assuring," as Administrator Browner testified, "state involvement in all aspects of Superfund." *Id.*; *see also, Government Operations Hearing, supra* note 42, at 58-59 (prepared statement of Jonathan Z. Cannon) ("In 1986, the Superfund Amendments and Reauthorization Act (SARA) expanded the scope of State involvement in all phases of hazardous site response under CERCLA. After SARA's enactment, [EPA] undertook a number of initiatives to facilitate participation by states ... .").

107. *See, e.g.*, 40 C.F.R. § 300.500(b) (1992) ("EPA shall encourage states to participate in Fund-financed response in two ways. ... [S]tates may either assume the lead . . . for the response action or may be the support agency in EPA-lead remedial response.").

108. To be the lead agency, a state must enter into a cooperative agreement, known as a Superfund Memorandum of Agreement ("SMOA"). *Id.* § 300.505(d)(3). The SMOA specifies schedules and EPA involvement if a state is going to serve as lead agency, even if the state will not receive federal funds to support its effort. *Id.*

project."[109] Further, CERCLA guarantees states a right to "substantially and meaningfully participate" in sites when the federal government is in the lead, again creating a structure that promotes overlapping efforts.[110]

While EPA has taken steps within this framework in an effort to minimize redundancy and conflict,[111] virtually every government interviewee stated that the major problem in the federal/state relationship is duplication of effort. Several interviewees described it as the "two cooks in the kitchen" syndrome. Other interviewees said that the agencies spend as much time negotiating between themselves as they do with PRPs. One state official said that the existing system "impedes [the] speed and number of cleanups because two levels of government are reviewing and approving investigations and cleanup plans for the same sites." Another official noted that duplication of effort occurs "throughout the entire process. ... The whole concept of lead/support agency creates redundancy."

The federal government should adopt an alternative framework for the federal/state relationship. As one federal official said, the state and federal governments should complement one another rather than oversee each other. He emphasized that the state and federal governments should not be working on the same sites, especially considering the large universe of sites and the inevitability of disagreement.[112]

As these comments from the interviewees reflect, duplication of effort is inherent in the current Superfund paradigm for the federal/state partnership. Superfund is founded upon a lead agency/support agency relationship, with the support agency having significant rights and, for EPA, significant responsibilities, rather than a model that is based on

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109. *Id.* § 300.5 (emphasis added).

110. *Id.* § 300.500(a).

111. Most significantly, EPA created the SMOA, in part, to prevent these conflicts from arising by "establish[ing] the nature and extent of EPA and state interaction during EPA-lead and state-lead response" in advance of any site activity. *Id.* § 300.505(a) (1992). EPA's *1991 Update* reports that as of December 1991, 18 states had entered into SMOAs with EPA. 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 3, 75.

112. Another federal official said that "the more you keep the governments out of each other's hair, the more we'll get done." A state official articulated that the problem "is duplication of effort. Either the U.S. EPA or the State should be in charge. We should pick one or the other." Echoing the same refrain, another federal official said: "The double teaming is inefficient. It's more efficient for one or the other to do it. Why not divide up the world?"

EPA and states performing clearly distinct functions.[113] The federal government should shift to a paradigm in which sites are divided early on and efforts are made to minimize the "joint venturing" of sites.[114]

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113. To some extent, EPA's provision of funding to states exacerbates this duplication of effort. EPA currently provides funds to states through several different contract mechanisms: (1) cooperative agreements to fund state efforts for sites for which a state will serve as "lead agency"; (2) cooperative agreements to fund state efforts for sites for which a state will serve as the "support agency" with EPA serving as the lead; and (3) Core agreements to fund non-site-specific state Superfund activity. 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 17.

According to one set of figures drawn from CERCLIS for the two-year period 1991-92, EPA provided states with $135,861,000 to fund "lead agency" activities; $13,068,000 to fund "support agency" activities; and $33,982,000 for Core grants. EPA personnel stressed that these numbers are not particularly reliable. Nevertheless, the numbers are telling from an order of magnitude perspective. On the "plus" side, these numbers suggest that most federal financial support of states does not go directly to site-specific "support" activities where overlap is inevitable. On the "down" side, EPA gave states more than $10 million during this period to review and comment on sites for which EPA itself was already in the lead. EPA should shift these funds to encourage a division of functions, not duplication of effort. EPA should seriously consider eliminating or significantly limiting support to cooperative agreements, and should instead provide this money to states, as Core grants, to help states build a state Superfund infrastructure, or as "lead agency" cooperative agreements, in which EPA should seek to significantly limit its involvement in reviewing and commenting on state efforts at such sites.

114. Some interviewees disagreed that the existing system results in an undue amount of duplication of effort. One interviewee said that currently the relationship between EPA and states is not defined and, therefore, "the states can make it what they want." One federal official said that "the sophisticated states are already at separate but equal." One state official said along the same lines: "In [my state], we've come to a pragmatic separation, not quite a divorce. We try to deal in good faith with mutual respect. We avoid each other when we can and listen to each other when we have to. It works, more or less."

Even if some states and regions have worked out arrangements that reduce duplication of effort, the interviewees appear to suggest that this is because at least some of these states have reduced their involvement at NPL sites. One state official indicated that his state played a very active role early on in the remedial process but that, more recently, the state had deliberately reduced its role considerably. For example, this particular state almost never takes the lead on an RI/FS for an NPL site. The interviewee indicated that despite its generally positive relationship with EPA, the state's decision to move to a lower profile in NPL sites stemmed in part from the inevitable frustration of being in a subordinate position and having EPA second-guess its decisions. In addition, the interviewee indicated that one of the reasons for the state's decision was to allow it to concentrate on the several hundred plus non-NPL sites in the state. He characterized the state's thinking: "At least EPA will be working

1. *Dividing Sites*

As suggested above, the federal government should give states with "capable" Superfund programs complete responsibility for particular sites.[115] Several interviewees urged that dividing responsibility for sites, rather than the current approach of sharing responsibility for them, will reduce oversight, eliminate duplication of effort and make the program more efficient.[116]

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on the NPL sites. If we [the state] do not focus on the non-NPL sites, no one will." In short, the state's shift in approach stemmed in part from its conclusion that it would be far more efficient de facto to divide these sites between the two agencies, with the state handling the several hundred non-NPL sites and EPA handling the relatively small number of NPL sites, rather than using substantial state resources to address NPL sites that would receive attention anyway.

115. For those sites at which states would qualify, this strategy essentially represents an ad hoc version of the "delegation model" for the federal/state relationship. *See infra* Section III.A.

One issue is whether CERCLA currently authorizes EPA to delegate to states complete responsibility for NPL sites. In Ohio v. EPA, 997 F.2d 1520, 1541 (D.C. Cir. 1993), the Court of Appeals for the District of Columbia Circuit noted that EPA has authority to delegate certain section 104 responsibilities to states, and that EPA's determination as to whether or not to delegate such authority is "clearly discretionary." The court, however, ultimately remanded for further explanation of EPA's decision in Subpart F of the NCP not to allow delegation of the authority to select the final remedy because this "blanket prohibition ... reflects an inexplicable change in policy." *Id.* at 1542. Thus, EPA currently appears to possess discretion to give states essentially complete responsibility for sites, but EPA has exercised its discretion to circumscribe the scope of responsibilities it delegates to states. Unless EPA officials demonstrate a willingness to change policy, a statutory change may prove necessary.

116. These interviewees recognized that revising the federal/state relationship in this way raises a multitude of issues. First, under the current NCP, if EPA provides state-specific financial support for state efforts at such sites under a cooperative agreement, EPA must be involved substantially in site activities. *See supra* note 110 and accompanying text. The federal government needs to change its cooperative agreements requirements to add flexibility by eliminating the need for such extensive overlap, or it needs to change the mechanism it uses to provide funds to states. A second issue that the federal government will need to resolve involves the level of oversight it should exercise concerning remedy selection in such cases. Currently, the NCP requires EPA to approve draft and final remedy selection documents before states may issue them. 40 C.F.R. § 300.515(e)(1), (2)(ii) (1992).

Several alternative models exist that would provide EPA oversight for state action. First, GAO has suggested in its report the most intrusive type of oversight. GAO recommended that if EPA defers sites, it "should actively review state cleanups ... ." STATE CLEANUP STATUS, *supra* note 42, at 67. GAO also noted that a state may

establish a "history of effectively remediating deferred sites. Less intensive oversight may be possible at that point." *Id.* Second, as one interviewee suggested, the federal government should approve state remedies, but should utilize the approach used by courts in exercising judicial review of an agency action -- a relatively deferential form of oversight -- rather than de novo review. Third, the federal government should consider the approach followed under the Clean Water Act, an approach in which EPA has veto authority rather than approval authority over state-issued National Pollutant Discharge Elimination System ("NPDES") permits. *See* 33 U.S.C. § 1342(d) (1988); 40 C.F.R. § 123.44. As the court stated in Save the Bay, Inc. v. EPA, 556 F.2d 1282, 1287 (5th Cir. 1977), EPA is to exercise this veto power "judiciously;" in fact, EPA is to administer the program "in such a manner that the abilities of the States to control their own permit programs will be developed and strengthened." *Id.* Finally, the least intrusive form of oversight would be to focus on the environmental results of the overall state program, perhaps using an auditing approach, rather than review every individual site decision.

Thus, a variety of models exist for federal oversight. In theory, all of these models share the trait of providing less oversight or review than EPA currently provides. The fundamental point the interviewees made is that oversight "should not be so overbearing as to defeat its purpose."

A related issue involves determining which site activities EPA should oversee. Various interviewees identified several options, including (1) the RI/FS work plan, (2) the draft RI, (3) the proposed plan and ROD, (4) a good faith offer, (5) negotiation time frames, (6) mixed funding decisions, (7) certification of the remedy, and (8) the five-year review.

A third issue involves the criteria which the federal government should use to determine to which states it should defer or with which it should divide sites. Interviewees provided collectively a long list of desirable attributes or capabilities that EPA should insist that states have to be eligible for full responsibility for federal Superfund sites. First, states should have adequate legal authority, including adequate enforcement authority (e.g., strict, and joint and several liability, which one federal official labeled as "key," but added is "blasphemy" in some state legislatures). One state interviewee, when asked what hinders cleanups at state, non-NPL sites, similarly identified the importance of adequate enforcement authorities, including strict, and joint and several liability, stating: "Without strict, joint and several there can be problems if a site has uncooperative PRPs." Second, states should also have adequate cost recovery authority and ability. According to a recent GAO report, lack of adequate cost recovery authority is a continuing weakness in the federal program as well. STATUS OF PROGRESS, *supra* note 36, at 8. Third, states should have adequate contracting authority and mechanisms. Several interviewees emphasized that a need exists to move these sites and that states cannot be subject to significant delays due to procurement problems. Like EPA, the states should have contractors on standby ready to respond. Fourth, states should have adequate staffing, in terms of both numbers of staff and competence. Fifth, states should provide adequate citizen participation procedures. Sixth, states should demonstrate a commitment to comply with the NCP on remedy selection and other issues. One interviewee disagreed with this attribute as a criterion,

stating that "the idea of a relationship with States based on their learning how to do our process is flawed. We have enough problems training our own staff." His advice was, as to the "process part, forget it." Instead, he recommended a focus on "environmental results." Seventh, states should establish a priority ranking system for addressing sites. Finally, states should have a track record of proven performance. As one state interviewee put it, there needs to be demonstrated capability to clean up sites. From a public relations perspective, the program is important enough and the amount of money is large enough that a state must show it can do the job, not merely that it is set up to do so. *See infra* note 123 and accompanying text (regarding steps EPA should take to evaluate the track record of states interested in selecting remedies).

On the issue of determining state capability, in its 1989 evaluation of seven state Superfund programs, GAO concluded that four features of state programs contribute to "increased progress: [s]pecific state authority to clean up hazardous waste sites[;] [s]trong enforcement tools to increase responsible-party actions, such as authority to impose triple damages and priority liens[;] [s]tate Superfunds to address sites without responsible-party funding[;] [and] [s]ufficient staff with suitable skills to oversee cleanups." STATE CLEANUP STATUS, *supra* note 42, at 29-30.

A fourth issue involves the factors the federal government should consider before it takes over a site or a state program. One federal official stressed that EPA needs to maintain sufficient staffing for this to be a realistic possibility. Another said that there is "a need for an approach to allow withdrawal for a particular site or a particular program, without the inadequacy rising to the nuclear problem level."

A fifth issue involves what federal authorities, if any, states should be able to use in this role. Several state officials argued that they should have the full panoply of federal authorities available to them. For example, CERCLA § 104 authorizes EPA to spend federal Superfund money, to subpoena testimony, and to obtain access to sites and documents. CERCLA § 104(a), (e), 42 U.S.C. § 9604(a), (e) (1988). Section 106 empowers EPA to order PRPs to conduct necessary work at sites. CERCLA § 106, 42 U.S.C. § 9606. Section 106 also creates potential fines of up to $25,000 per day for failure to comply with such an order. CERCLA § 106(b)(1), 42 U.S.C. § 9606(b)(1). In addition, CERCLA § 107(c)(3) creates the sanction of treble damages for failing to comply with such an order. CERCLA § 107(c)(3), 42 U.S.C. § 9607(c)(3). *See, e.g.*, United States v. Parsons, 936 F.2d 526 (11th Cir. 1991); United States v. Carolina Transformer Co., 978 F.2d 832 (4th Cir. 1992). Several federal officials who favored dividing the universe of sites between EPA and the states opposed the delegation of CERCLA enforcement authorities, independent of their position on other aspects of delegation. Their reasoning, with which some state interviewees sympathized and others disagreed, was that such a delegation would lead to inconsistent approaches to enforcement and to the inappropriate inconsistent construction of CERCLA by various states. One federal official said that one of his concerns with delegation "is that the federal government would be on the sidelines while law is being made. Superfund enforcement would never have succeeded without a strong body of case law. Delegation would undermine this."

A sixth issue involves the appropriate nature and extent of state authority to address federal Superfund sites using federal resources. Should EPA delegate only the

At the outset, the federal government should be selective in choosing the sites for which states will receive lead status, perhaps using EPA Headquarters' traditional criteria for delegating responsibilities to the regions. For example, EPA might retain sites of national significance, sites for which the remedy will cost above a certain dollar value, or sites that "involve complex area-wide contamination."[117] Some interviewees suggested that certain sites might be worth special consideration for state lead early on. This category includes sites for which "presumptive remedies" exist, that is, sites for which a certain type of remedy is generally presumed to be appropriate. Caps for landfills are an often-cited example.[118]

Although the subject of state "capability" has already been discussed,[119] the issue of remedy selection, including the merits of a change in EPA's policy to allow states to select remedies, deserves special attention. Remedy selection is the component of the program

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authority to require action like the RCRA corrective action delegation, or should delegation include access to the federal Superfund as well? If the latter, how should the money be allocated among states -- through block grants based on population, on number of CERCLIS sites, on number of NPL sites, on a site-by-site basis, etc.? Should states be able to keep money they recover; and what type of additional oversight is required?

117. In his January 16, 1985 memo, *Guidance on Delegation of Selection of Remedy Authority to Regions*, Jack W. McGraw, then Acting Administrator for EPA's Office of Solid Waste and Emergency Response ("OSWER"), stated that EPA's initial target goal was to delegate 60% of the federal FY 1985 RODs to the Regions. In his March 24, 1986 memo, *Delegation of Remedy Selection to Regions*, then Assistant Administrator for OSWER J. Winston Porter noted that EPA's revised goal was that 90% of RODs be delegated to the Regions. *Id.* at 1. In his February 18, 1993 memo, *Twenty Fourth Remedy Delegation Report - FY 1993*, Acting Assistant Administrator for OSWER Richard J. Guimond stated that the purpose of his memo was to delegate all RODs to the Regions, with Headquarters to retain a "consultation" role for RODs under certain circumstances. For example, the Region must consult the Assistant Administrator for OSWER if the remedy is anticipated to cost more than $60 million.

118. Several interviewees urged greater use of presumptive remedies for several types of sites. Other interviewees cautioned that, while presumptive remedies sound good in concept, a need would still exist for site-specific decisions. They further cautioned that presumptive remedies may cause newer technologies to take a back seat. For a summary of the concept of using presumptive remedies to accelerate Superfund cleanups, see EPA's SUPERFUND PROGRESS, *supra* note 49, at 9-10; *see also EPA Seeks Advice from Outsiders on Addressing Superfund Data Gaps*, SUPERFUND REP., June 30, 1993, at 13; Browner, *supra* note 46, at 14.

119. *See, e.g., supra* note 85 and accompanying text.

over which EPA traditionally has been most reluctant to cede control because remedy selection plays a central role in the Superfund program.

Much of the tension between EPA and the states reaches the surface during the development of the ROD because the ROD resolves the central issue in the federal Superfund program: What is the appropriate remedy?[120]

EPA has taken the policy positions that section 121[121] of CERCLA governs remedy selection, and that section 121(a) vests responsibility for selecting remedies with EPA.[122] As a result, EPA generally has allowed states to play only a subordinate role in the remedy selection process with respect to NPL sites.[123] The federal government

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120. *See* 40 C.F.R. § 300.430(f)(5) (1992).

121. CERCLA § 121, 42 U.S.C. § 9621 (1988); Starfield, *supra* note 4, at 10,242-43.

122. *See supra* note 103 and accompanying text.

123. One exception exists to this general division of responsibility for remedy selection. As one interviewee put it, EPA is "pilot testing the idea" of having states take the lead at NPL sites: an idea which would include states selecting the remedy without a need for EPA concurrence and ensure that the necessary cleanup action occurs without federal involvement or funding.

The NCP contemplates such an approach. 40 C.F.R. § 300.515(e)(2)(i). The NCP further contemplates that EPA and the states will enter into enforcement agreements for such sites that "specify schedules and EPA involvement." *Id.* § 300.505(d)(3). In an April 1991 guidance document, EPA stated that "[it] may take back the lead from a State if the State does not comply with the EPA/State agreement." QUESTIONS AND ANSWERS, *supra* note 103, at 3. To the best of the author's knowledge, no such agreements have been consummated. *See supra* note 103.

One interviewee mentioned that EPA is moving on a parallel track toward giving states a much greater role in overall remedy selection through developing the national groundwater strategy. This interviewee said that under this strategy, states will decide the extent of groundwater cleanup.

In practice, EPA regions and states have developed different approaches to this issue of the states' role in the ROD process. At a minimum, under CERCLA, states have an opportunity to review and comment on the proposed plan for remedial action before EPA selects the final remedy. 40 C.F.R. § 300.515(e)(1) (discussing that CERCLA expressly provides for "substantial and meaningful involvement by each state [in] initiation, development, and selection of remedial actions"); *see* CERCLA § 121(f)(1), 42 U.S.C. § 9621(f)(1).

In contrast, when the region and the state agree, the state will develop the proposed remedial action plan, draft the ROD, and provide it to EPA for comment. *Id.* EPA must approve the proposed plan before it can be issued for public review and comment. *Id.* EPA must also approve and adopt the remedy for a Fund-financed

should change this policy to authorize states that it deems "capable" to make these decisions.

EPA should collect and evaluate the considerable statistical information it already possesses relating to whether a particular state is qualified to select remedies.[124] For example, the NCP requires EPA and the states to identify annually all of the sites for which RODs will be prepared and to divide responsibility for preparing such RODs.[125] For "all EPA-lead sites, EPA shall prepare the ROD and provide the state opportunity to concur with the recommended remedy," and for certain mutually-agreed upon state-lead sites, "the state shall prepare the ROD and seek EPA's concurrence and adoption of the remedy specified therein."[126]

In assessing the capability of each state interested in selecting remedies, EPA should evaluate certain data in connection with sites for which EPA selected the remedy. First, EPA should determine the number of RODs with which the state refused to concur.[127] Second, EPA should evaluate the significance of this number of disagreements, given the total number of RODs that EPA has developed. Third, EPA should determine the extent to which these disagreements are substantive and not due to other factors, such as a state's inability to meet its cost share obligations. Finally, EPA should examine whether particular substantive issues are commonly the basis for these disagreements.[128]

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response action to proceed. 40 C.F.R. § 300.515(e)(2)(ii). Even if a state takes an active role in developing the remedy, EPA retains a "veto" for a Fund-lead project.

124. *See supra* note 85 (discussing the criterion of state's track record as one of GAO's four suggested factors for evaluating state capability).

125. 40 C.F.R. § 300.515(e)(2)(i).

126. *Id.* EPA prepares the RODs for the remaining fund-financed, state-lead sites. *Id.*

127. If the federal government intends to implement a remedy with federal Superfund monies, state concurrence is essential. CERCLA effectively provides states with an absolute veto, giving them considerable leverage over EPA's choice of remedy. Under CERCLA § 104(c)(3), before EPA can implement a Fund-financed remedial action, the state must concur on the remedy and commit funding to 10% of the construction costs of the remedy. CERCLA § 104(c)(3)(B), 42 U.S.C. § 9604(c)(3)(B) (1988). States must make other commitments, including assuring any necessary adequate off-site capacity, assuring acceptance of transfer of any property acquired by EPA necessary to the cleanup, and accepting certain responsibilities for operation and maintenance. CERCLA § 104(j)(2), 42 U.S.C. § 9604(j)(2).

128. Several interviewees cited remedy selection as the most significant source of tension between states and EPA. The anecdotal information they provided suggests that EPA should obtain the empirical information described above to develop a better

For example, some state interviewees complained that EPA remedies are not sufficiently stringent, whereas other state officials claimed that EPA's remedies are overly protective.

Similarly, for those RODs that states have prepared and recommended to EPA, EPA should determine (1) the level of the state's experience by how many RODs the state has developed; (2) how often EPA and the state have agreed or disagreed; and (3) whether particular types of disagreements arise frequently. In addition to these substantive measures of capability, EPA should evaluate timeliness and other procedural issues relating to capability.

EPA should also review other data in evaluating state capability to select remedies. As noted above,[129] EPA is "pilot testing" having

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understanding of the source and nature of this tension.

For example, one federal official explained that EPA and the states often shift sides on remedy depending on the site. He suggested that the specific substantive cleanup standards are not the primary source of tension. Instead, he pointed to a need to improve the system to minimize the possibility of such disagreements between the two sovereigns.

In contrast, several other interviewees offered a different assessment of the problem, stating that a pattern of disagreements on substance exists between EPA and a number of states. As one federal Headquarters official stated, "[A]ggressive states have a different vision of the program. ... This is the problem." A state official said that, in contrast to EPA, "several states think they have an obligation to try to pump and treat groundwater, even if it won't work." As one federal regional official commented, "the states tend to not buy into the idea of obtaining protective remedies at the maximum number of sites. They tend to want the most costly, permanent remedy at each site."

EPA's *90-Day Study* cites "lack of State concurrence with the remedy selection as a major delay in moving sites toward remedial action." 90-DAY STUDY, *supra* note 30, at 3-10. The authors of the *90-Day Study* continue:

> In some cases, State resistance appears to be cost-related--States are unwilling or unable to assume their share of the cost of the remedial alternative selected or to commit themselves to financing lengthy O & M. In other cases, State resistance stems from differences with EPA concerning feasible or appropriate levels of site cleanup. Whatever the underlying cause, lack of State concurrence can cause substantial delays in the remedial process, including the "shelving" of RODs at Fund-lead sites and lengthy legal battles at enforcement-lead sites.

Id.

129. *See supra* note 123 (discussing EPA's pilot testing of state lead at NPL sites).

states select remedies at federal Superfund sites without the need for EPA concurrence. EPA should determine the number of these sites and evaluate the same data as to these sites.

Another feature of the current CERCLA structure provides a fourth set of data that EPA should use in determining which states are currently capable of selecting remedies. CERCLA gives states certain rights if they disagree with EPA's remedy selection decision for sites for which PRPs will implement the remedy.[130] Such remedies are embodied in consent decrees that CERCLA requires be lodged with and then entered by a United States district court.[131] A state may challenge a consent decree on the ground that it is unfair, unreasonable or inconsistent with the Constitution or the mandate of Congress.[132] Furthermore, if EPA has waived an applicable or relevant and appropriate requirement ("ARAR"),[133] a state may seek conformance with the ARAR by opposing the entry of the consent decree memorializing the PRP's commitment to implement EPA's ROD based on the ROD's non-compliance with the ARAR.[134] If the state

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130. *See* CERCLA § 121(f), 42 U.S.C. § 9621(f). CERCLA authorizes EPA to issue administrative orders or seek judicial orders, compelling responsible parties to conduct hazardous waste cleanups, when "an imminent and substantial endangerment to the public health or welfare or the environment" exists. *Id.* § 106, 42 U.S.C. § 9606. If a state agrees with EPA's decision, it may join as a party to the consent decree that memorializes the PRPs' obligation to implement the ROD. *Id.* § 121(f)(2)(A), 42 U.S.C. § 9621(f)(2)(A).

131. *Id.* § 122(d)(1)(A), (g)(4), 42 U.S.C. § 9622(d)(1)(A), (g)(4).

132. *See, e.g.*, United States v. Cannons, 720 F. Supp. 1027, 1036 (D. Mass. 1989), *aff'd*, 899 F.2d 79 (1st Cir. 1990).

133. Section 121 of CERCLA mandates that remedial actions comply with any applicable or relevant and appropriate "standard, requirement, criteria, or limitation under any Federal environmental law ...." CERCLA § 121(d)(2)(A)(i), 42 U.S.C. § 9621(d)(2)(A)(i). Congress adopted the concept of ARARs in the 1986 SARA amendments, borrowing the concept from EPA's 1985 Superfund regulations. Starfield, *supra* note 4, at 10,228, 10,230-31. ARARs represent an effort to avoid reinventing the wheel on cleanup standards. In effect, CERCLA adopts standards from other environmental statutes. For example, if EPA has decided under the Safe Drinking Water Act that an acceptable concentration of benzene in drinking water is 5 parts per billion ("ppb"), EPA will adopt 5 ppb as its cleanup standard for benzene in water that is used or may be used as a drinking water source in selecting a remedy for a Superfund site. For a brief background on ARARs, see *id.* at 10,230-31.

CERCLA allows EPA to waive an ARAR in six instances. CERCLA § 121(d)(4), 42 U.S.C. § 9621(d)(4).

134. *See* CERCLA § 121(f)(2)(B), 42 U.S.C. § 9621(f)(2)(B).

establishes that EPA's waiver of the ARAR was indefensible, the court may modify the remedial action to conform to the ARAR.[135] States have brought a number of judicial challenges to EPA-selected remedies on this ground.[136]

These decision points in the federal process for enforcement cases provide the federal government with an opportunity to obtain a set of empirical information by which the government may further evaluate state capability to select remedies. For states with an interest in selecting remedies at federal Superfund sites, EPA should develop the following information. First, EPA should determine for how many RODs the state has challenged a consent decree. Second, EPA should evaluate the significance of this number of disagreements, given the total number of RODs that EPA has developed in that state. Finally, EPA should determine whether particular substantive issues commonly provide the basis for these disagreements and, if so, what they are.

The interviewees' comments offered a preview of at least one likely finding from the four sets of empirical information described above. Several interviewees identified the issue of state ARARs as a frequent source of conflict.[137] Consequently, EPA should focus on this issue in developing its data.

State ARARs are duly promulgated state standards that are more

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135. *Id.*

136. *See, e.g.*, United States v. Akzo Coatings, 949 F.2d 1409, 1448-49 (6th Cir. 1991).

137. Pursuant to SARA, CERCLA remedial actions "must comply with applicable or relevant and appropriate requirements of state environmental and facility siting laws ... where those requirements are promulgated, identified in a timely matter, and more stringent than those under federal law." Starfield, *supra* note 4, at 10,236; *see* CERCLA § 121(d)(2)(A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii). This requirement has caused problems because,

> [s]ome states have provided mere "laundry lists" of state laws and/or regulations, without specific discussions of how, if at all, they relate to the site. This has resulted in delays and wasted resources. To avoid this problem in the future, the preamble to the final NCP directs states to provide "a list of requirements with specific citations to the section of law identified as a potential ARAR, and *a brief explanation of why that requirement is considered to be applicable or relevant and appropriate to the site.*"

Starfield, *supra* note 4, at 10,236 (emphasis in original) (quoting 55 Fed. Reg. 8746 (1990)).

stringent than the federal standards.[138] A number of federal interviewees strongly criticized CERCLA's current treatment of state ARARs. One commonly voiced complaint was that states do not apply their own ARARs consistently. One federal interviewee, capturing this sentiment, stated that "it's easy for states to demand that EPA meet the ARARs, but they don't do it themselves at their state sites." In contrast, state interviewees complained that EPA ignores state ARARs.

Based upon the interviews, one answer to this issue may lie in "following the money."[139] Currently, CERCLA requires EPA to meet state requirements that are more stringent than federal requirements.[140] For Fund-lead sites, CERCLA authorizes the use of federal funds to pay for the extra cleanup needed to meet these requirements.[141]

Several interviewees objected to the current approach from a policy perspective. First, they said that the approach inappropriately separates the responsibility to develop more stringent requirements from the responsibility to pay for them. Second, they indicated that this approach differs from the approach followed in most programs, in which the federal government provides the "base" and a state that wants additional protection must pay for it.[142] Third, they claimed that this

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138. Section 121 of CERCLA requires remedial actions to conform to any applicable or relevant and appropriate "State environmental or facility siting law that is more stringent than any Federal standard, requirement, criteria, or limitation ...." CERCLA § 121(d)(2)(A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii). For example, if EPA has established a limit of 10 ppb for benzene in drinking water and Oklahoma has established a limit of 5 ppb, Oklahoma's standard meets the stringency requirement of an ARAR. *Cf. supra* note 133 (discussing federal ARARs).

139. This phrase has a long history in a variety of contexts, including the environmental arena. *See e.g.*, Marlise Simons, *West Offers Plan to Clean Up East*, N.Y. TIMES, May 4, 1993, at A13.

140. CERCLA § 121(d)(2)(A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii) (1988).

141. *Id.* Alternatively, CERCLA allows EPA to waive an ARAR where the cost of attaining the ARAR is not commensurate with the additional protection to human health and the environment. *Id.* § 121(d)(4)(F), 42 U.S.C. § 9621(d)(4)(F).

142. In instances where the final remedy selection does not incorporate the state ARAR, either by waiver, late identification or some other reason, the state may fund the additional cost for its attainment, provided the ARAR is not inconsistent with the EPA-selected remedy. 40 C.F.R. § 300.515(f)(1)(ii) (1992); *see also* Starfield, *supra* note 4, at 10,243 (discussing remedy enhancement); Babich, *supra* note 3, at 10,009 ("[i]n the past, when faced with the need to deal with thousands of pollution sources, EPA has implemented regulatory programs through a system called 'cooperative federalism.' Under this system, EPA establishes federal standards to create a floor beneath which environmental quality must not drop.") (citations omitted); Belsky, *supra*

approach is unfair because it, in effect, requires the federal taxpayer in one state to subsidize the taxpayer in another. For example, why should State Y and other states subsidize State X's judgment that the federal standard is inadequate if (1) EPA concludes that ten parts per million ("ppm") cadmium in the soil is safe; (2) State X promulgates one ppm as an ARAR for cadmium; (3) the cost of cleaning up to ten ppm is $1 million; and (4) the cost of cleaning up to one ppm is $10 million?[143] Several interviewees said that the conflicts between EPA and the states regarding state ARARs would diminish if Congress changed CERCLA to allocate to states the extra cost of cleanup required to meet state ARARs.

As part of its data collection effort to determine state capability to select remedies, EPA should develop information on the role of state ARARs in the remedy selection process and on the extent to which state ARARs have been the cause of disagreements between EPA and states. First, EPA should determine how often state ARARs control remedy selection, and at how many sites state ARARs have been the basis for selecting a remedy. Second, EPA should find out which specific state ARARs have provided the basis for an EPA-selected remedy. Third, EPA should gather information as to how often EPA has waived a state ARAR. Several federal officials indicated that EPA rarely, if ever, invokes its authority under CERCLA to waive state ARARs. EPA should decide whether this observation is true, and if it is, why this is the

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note 3, at 29 ("states ... were encouraged to build on the minimum federal requirements by adopting and applying more stringent rules. The 1977 Amendments to the Federal Water Pollution Control Act and the Clean Air Act made it explicit that states could establish controls that were more restrictive than federal requirements").

143. The interviewee who suggested this hypothetical indicated that the inappropriateness of such a subsidy is even more clear if State Y has determined that the appropriate standard for cadmium is 10 ppm or higher.

The Office of Solid Waste and Emergency Response has recommended that remedies be standardized by either site category or soil cleanup standards. The office has estimated that such an effort would take three to six years to complete. PROBLEMS WITH SITE CLEANUP PLANS, *supra* note 38, at 45.

A fourth related concern is that EPA funding of state ARAR implementation creates a greater likelihood of inconsistencies across states. For example, the capping of a particular site is permissible in one state, but a similar site in another state cannot be capped.

case.[144] Finally, EPA should determine to what extent states apply their own ARARs consistently; which state ARARs are commonly invoked by states; and to what extent these states apply these ARARs themselves at state sites.

By developing this information, EPA will advance the debate on the causes and frequency of EPA/state disagreements on remedy selection issues and thereby advance its effort to evaluate state capability. This information will also help EPA's effort to develop strategies that will minimize these disagreements for sites where EPA will continue to select the remedy.

The final step EPA should take to evaluate capability pertains to states that are interested in making remedy selection decisions at federal Superfund sites, but have an inadequate track record in the federal program. To determine capability in such cases, EPA should review state performance in selecting remedies in the state Superfund program, as well as the state's RCRA delegation status and its performance in overseeing corrective action and closure under RCRA.

2. *Dividing Functions*

In a somewhat less extreme break from the current paradigm, the federal government should look for opportunities to allocate responsibilities to states that may not be ready to accept full responsibility for sites. Instead of dividing responsibilities with states by dividing up sites, EPA would divide responsibilities according to function. Based on the interviews, EPA divides functions reasonably effectively in the Preliminary Assessment/Site Inspection ("PA/SI") context, involving the preliminary studies conducted at sites.[145]

The interviewees indicated that many states participate actively in the PA/SI process.[146] According to one interviewee, a state can arrange the following role. First, the state will conduct most of the PA/SIs with EPA funding. Second, the state and EPA will utilize multi-

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144. EPA's practice of refusing to incorporate a state-asserted ARAR without formally waiving the requirement raises another issue. EPA follows this practice when it believes that the state requirement is not an ARAR. Statistics concerning the number of times EPA has taken this position would be valuable but probably difficult to obtain.

145. *See supra* note 101 (discussing the role of PA/SIs in the Superfund process).

146. *See supra* note 101 and accompanying text (discussing states' performance of over 60% of the PAs, and over 30% of the SIs); *see also* TEN YEARS OF PROGRESS, *supra* note 46, at 31.

site funding agreements to reduce bureaucratic paperwork. One state interviewee indicated, for example, that the state had recently signed an agreement with the EPA region that covered funding for the state's performance of PA/SIs at thirty sites.[147] Third, to minimize duplication of effort and possible conflict, EPA will agree to notify the state before EPA decides to perform a PA/SI itself. In addition to states' work under the federal program, states conduct a great deal of work at non-federal sites. Advance notification by the federal government will help to minimize duplication of effort. Based on the interviews, this process seems to work well from a EPA/state perspective. States conduct a considerable amount of the work. The federal government should seek to increase the percentage of PA/SI work that states conduct and should seek to expand state hands-on responsibility beyond this stage.[148]

3. *An Improved "Dual Role" Framework*

Even after improving the federal/state relationship by creating a new bias toward dividing rather than sharing sites and establishing a better defined functional division of responsibilities, the federal government needs to improve its approach by addressing a third set of sites: sites that are important state and federal priorities and at which both the state and federal governments want to be actively involved throughout the Superfund process.

The federal government needs to work with states to develop mutually acceptable ground rules for jointly handling such sites. Such ground rules currently do not exist. Interviewees from one region discussed in detail the extensive experience they have had in negotiating three-party consent decrees -- settlements involving the United States, the state and the PRPs. Certain issues are endemic to this negotiation process. According to the interviewees, these issues have both a substantive dimension and an "attitudinal" component. Regarding the latter, one federal official articulated: "The federal government has created a highly structured, very resource intensive process. It wants to

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147. *See* 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 75 (reporting that 38 states have entered into multi-state cooperative agreements with EPA).

148. *See supra* note 101 (noting that states do far fewer RI/FSs). As part of this effort to increase state responsibility, EPA should evaluate state capability to conduct increasing numbers of PA/SIs and RI/FSs. *See supra* Section II.D.1 (discussing the types of information EPA would need to evaluate such capability). EPA also should evaluate the level of its oversight of such work and reduce it whenever possible.

win all the issues with everyone. And it presents issues [to states] on a take it or leave it basis: 'We'd like to have a partnership. The terms of the partnership are ....'" A state official participating in this effort said along the same lines: "There needs to be a true model consent decree that EPA and the states agree to, but we would need give and take on this, and EPA is not used to giving."

The above-referenced EPA region and the states within that region are attempting to develop such guidelines, rather than continually "relitigating" the same issues concerning their relationship on an ad hoc, site-by-site basis. First, the interviewees believed that negotiating the terms of three-party consent decrees anew on a site-by-site basis did not make sense. Instead, the federal and state governments should develop a model consent decree with which both would be comfortable. Second, if the federal government is willing to acknowledge the reality of state sovereignty, the federal and state governments should be able to narrow the differences that currently exist. For example, as several interviewees from both the state and federal governments noted, the United States should not insist that a state give up its right to seek to reopen a consent decree if the state later determines that the remedy is not protective.[149]

The interviewees who are involved in this effort were cautiously optimistic about its potential for improving relations between the governments in the enforcement arena. The federal government needs to support this effort and encourage the development of ground rules that will establish a solid foundation for federal/state coordination at sites where both governments choose to be actively involved.

Achieving up front a mutually acceptable understanding of the respective roles of the federal and state governments, together with the change in attitude discussed above, will improve the federal/state

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149. According to the interviewees, part of the problem is that the governments have different views of states' rights. States view themselves as sovereigns with a responsibility to safeguard their environment and citizens. EPA views itself as the ultimate arbiter of what is safe and what is unsafe.

States and regions have utilized different approaches to address this reality. First, as suggested in the text, some states and regions have continued to negotiate three-party consent decrees to which EPA, the state and PRPs are parties. Second, some states have essentially dropped out of the federal enforcement process as much as possible. In some cases, these states have chosen to focus on non-NPL sites. Other states have dropped out because they consider the federal demands that the states cede their sovereignty as a condition to being a party to a settlement unreasonable. Finally, a minority approach utilized by a few states and regions allows states to take the enforcement lead at federal NPL sites, with EPA playing a background role.

relationship at sites where both governments feel a need for active involvement.

4. *Streamlining the Federal/State Relationship by Streamlining the Federal Bureaucracy*

In addition to taking a variety of steps to streamline the federal/state relationship, the federal government should streamline its own handling of Superfund sites. Several interviewees recommended eliminating, or dramatically curtailing, the role of the United States Department of Justice ("DOJ") in the Superfund settlement process.

CERCLA authorizes DOJ to approve settlements by requiring that remedial settlements be lodged and then entered in federal court.[150] EPA must refer a site to DOJ for lodging in court and DOJ may refuse to lodge the settlement or may delay its lodging if DOJ disagrees with the terms of the settlement.[151] One interviewee suggested that presumably Congress provided a role for DOJ in the settlement process due to congressional paranoia lingering from the early Superfund era. This interviewee continued by saying that the process simply cannot withstand the consequences of this paranoia any longer.[152] Another interviewee said that DOJ should litigate cases, not settle them. The consensus of the interviewees was that one federal bureaucracy, or two bureaucracies if EPA Headquarters is involved, should be capable of negotiating settlements and that attenuating authority creates inefficiencies and duplication of effort that the federal government cannot afford and should eliminate.[153]

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150. CERCLA § 122(d)(1)(A), (g)(4), 42 U.S.C. § 9622(d)(1)(A), (g)(4) (1988).

151. *Id.* § 122(d)(2)(B), 42 U.S.C. § 9622(d)(2)(B). In addition to its role in judicial settlements, DOJ has a role in Superfund administrative settlements. CERCLA § 122(g)(4) provides that when an administrative order memorializes a settlement, the Attorney General must approve the order in advance if the total response costs exceed $500,000. *Id.* § 122(g)(4), 42 U.S.C. § 9622(g)(4).

152. For a critical summary of the agency's performance during the early Superfund years, see *Chapter 1 Environmental Protection Under Reagan: What Went Wrong*, HERITAGE FOUNDATION REPORTS 19 (1986).

153. Only one interviewee expressed support for a DOJ role. This interviewee noted that the CERCLA requirement that remedial settlements be lodged and then entered in court provides a forum for states to challenge the remedy if they disagree with it. *See* CERCLA §§ 113, 121, 42 U.S.C. §§ 9613, 9621; *see also* United States v. Town of Moreau, 751 F. Supp. 1044 (N.D.N.Y. 1990). Because this interviewee still opposes a DOJ sign-off, he emphasized that Congress should develop a better mechanism for

E. *Finding Five: The federal government should eliminate existing financial incentives toward conflict.*

Ironically, the current structure of the federal Superfund program's cost share provisions results in a bias toward conflict between the federal and state governments by creating conflicting financial incentives for the two governments. The federal government should eliminate this systemic bias toward conflict.

The most significant costs associated with Superfund sites are (1) the cost of constructing and implementing the remedy and (2) the cost of operating and maintaining the remedy.[154] According to EPA's interpretation, CERCLA allocates to states ten percent of the construction costs and one hundred percent of the operation and maintenance ("O & M") costs.[155] EPA bears the remaining costs: ninety percent of the

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states to challenge settlements with which they disagree.

The author does not recommend divesting the federal courts of their authority to review settlements for fairness and legal defensibility. The opportunity for judicial review of EPA-approved settlements remains essential for states, as well as non-settlors and members of the public. Congress should restructure CERCLA to eliminate or limit DOJ's role without eliminating the role of the federal courts in ensuring the fairness and legal defensibility of such settlements. An option that Congress might consider is to allow EPA to represent itself in court in connection with such settlements, perhaps by designating EPA attorneys as Assistant United States Attorneys for this purpose. Such an approach would require legislative change. *See* 28 U.S.C. § 516 (1988) (reserving representation of the federal government solely to the Department of Justice).

154. *See* 40 C.F.R. § 300.500 (1992). For example, building a landfill would be part of the construction phase of the remedial process. Once the landfill is constructed and being used as a disposal facility, the costs of operating and maintaining that landfill, such as the cost of cutting the grass on the top of the landfill, would be part of the O & M phase.

155. Ohio v. EPA, 997 F.2d 1520, 1543-46 (D.C. Cir. 1993) (upholding EPA's interpretation of CERCLA on this issue). In the states' amended joint opening brief, the states spent approximately 90 pages out of a total of 199 pages challenging the NCP's construction of CERCLA on a variety of state role issues. *See* Petitioner's Amended Joint Opening Brief, Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993) (No. 86-1096).

CERCLA requires states to assume "10 per centum of the costs of the remedial action, including all future maintenance." CERCLA § 104(c)(3)(C)(i), 42 U.S.C. § 9604(c)(3)(C)(i) (1988). EPA has interpreted this provision to mean 100% of O & M costs, 55 Fed. Reg. 8736, 8740 (1990). Several states have suggested that EPA's reading is at odds with CERCLA § 104(c)(7), which designates the source of funds for

construction costs and zero percent of the O & M costs.

Because of the disparity in state cost share, states have a strong financial incentive to favor a remedy that is construction intensive and involves minimal O & M. Because EPA's cost share is ninety percent for construction costs and zero percent for O & M, EPA's financial incentives are in direct conflict with the states' incentives and drive EPA to select a remedy that is light on construction costs and O & M intensive.

Before the Court of Appeals for the District of Columbia Circuit resolved this disagreement,[156] even federal officials conceded that if they should prevail with their interpretation of CERCLA on this issue, the question of who pays for O & M should be revisited. One federal official said that the differential cost share "increases the likelihood of government being at loggerheads. [The federal and state governments] have different interests. The difference in cost share for capital costs and O & M gets in the way of making good public policy decisions." Another federal official said that he did not think that Congress "anticipated the strain on the system by creating an incentive for states to front-load cleanups by heavy capital costs and creating opposite incentives for the federal government." A state official agreed that a differential cost share creates "a built-in incentive for conflict." Another state official pointed out that this conflict arises because the cost share is "not a minor differential."

Furthermore, many interviewees, particularly state officials, voiced their opinion that this built-in incentive for conflict has become a reality at many sites and drives EPA to favor remedies with low construction and high O & M costs.[157] An EPA regional official countered with the federal perspective that states have also allowed the disparity to influence

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"the Federal share of the payment of the cost of operation and maintenance pursuant to (3)(C)(i)." 42 U.S.C. § 9604(c)(7). These states take the position that CERCLA creates a 90%(federal)/10%(state) cost share for O & M, the same ratio CERCLA establishes for construction costs. *See* Petitioner's Amended Joint Opening Brief, at 120-31, Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993) (No. 86-1096). Nine states joined this brief: Pennsylvania, Minnesota, Colorado, California, New Jersey, New York, Kentucky, New Mexico, and Ohio. On some issues, these states do not agree among themselves. *Id.* at 1.

156. *See supra* note 155.

157. Some federal officials conceded that the differential cost share creates a financial incentive for conflict but said that they have never seen data to support the existence of such conflict.

their judgment, stating that "if the state knows it will have to pick up the O & M, then the state tends to push for extras in the remedial process."

A number of interviewees said that they are seeing an increasing number of cashouts.[158] Because of their differing financial interests, the federal/state relationship is suffering unnecessarily in this context. One federal official said that "very contentious debates [have occurred] regarding what amount of the proceeds go [sic] towards construction and what percentage goes to O & M." Along the same lines, a state official stated: "The PRP cashout issue is a problem. ... [My state] doesn't always have the same interests as U.S. E.P.A. For example, [my state] does not benefit by early cashouts of PRPs [for construction costs]."

In addition to these conflicts, interviewees said that the disparity in cost share for construction and O & M costs frequently leads to disputes regarding where government should draw the line between the definitions of O & M and construction. Interviewees explained that, as expected given the different financial incentives, EPA has adopted the position that under CERCLA, relatively more activities should be characterized as O & M rather than construction, and states have taken the opposite tack.[159]

Finally, state interviewees opined that EPA's interpretation of its cost share responsibilities causes EPA systematically to treat O & M lightly in the remedial selection process. One interviewee characterized this treatment by saying that "O & M is 'dumped' on the state. EPA is not very concerned with O & M in remedy selection."[160]

Having a financial structure that creates a different cost share for different parts of the process appears to be a major source of tension between EPA and the states. Differential cost shares have the potential to drive the federal and state governments in opposite directions on remedy issues due to their potentially conflicting financial interests.

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158. "Cashouts" are settlements in which PRPs pay money to the government rather than commit to conduct work at sites.

159. The litigation also involved the issue of when a response becomes "operational," with the court noting that "[g]iven that states are responsible for 100% of operations and maintenance (O & M) costs, the determination of the point at which a response becomes 'operational' is an extremely important aspect of the cost sharing issue." *Ohio v. EPA*, 997 F.2d at 1546.

160. One federal official conceded the state interviewees' basic point that EPA treats O & M lightly, but said that this problem is not driven by who pays for O & M. He suggested that government should develop better cost estimates and expressed his belief that estimates will improve over time.

Levelling out the cost shares, so that both EPA and state shares are even throughout the process, would eliminate a potentially significant financial incentive for conflict that is inherent in the existing system. As one interviewee said, "If there were the same cost share you would get rid of a lot of the problems [between EPA and the states]."[161] An EPA interviewee stated more generally, "Anything you can do to make EPA

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161. A separate issue is what the level cost share should be for each government. The cleanest option is to make the federal government bear 100% of the cost for the sites where it has the lead and have states do the same for state-lead sites. This approach is probably most consistent with the objective of maximizing efficiency by dividing sites, instead of "double teaming" them. *See supra* Section II.D.1.

A second option is to increase the states' share of construction costs to compensate for reducing their share of O & M. Some interviewees, who believe that states who want an equal or close to equal role should pay an equal amount, agree with this option. Several interviewees said that the limited state share fosters an unrealistic state approach to federal money -- states operate as if they are playing with "free money" and therefore they want to spend it all. These interviewees recommended a state share that is high enough to make states financially accountable as a condition for states' ability to influence remedy selection. They were confident that with such a shift, the dynamic would change dramatically, and states would not push for expensive remedies. Even these interviewees recognized, however, that creating a higher cost share would exacerbate the inability of several states to meet their share.

One EPA interviewee voiced the concern that EPA could not afford to bear a portion of O & M costs. Based on the interviews and other information, states are also unable to bear these costs. Several interviewees reported that some states currently are not meeting their O & M commitments, and that several states similarly are unable to meet their 10% cost share obligation. In his statement to the Environment, Energy, and Natural Resources Subcommittee summarizing OTA's report *Coming Clean*, Dr. Joel S. Hirschhorn, then Senior Associate at OTA, said that "cleanups for sites within the Superfund program are often less stringent and less costly because of states' efforts to minimize or eliminate their 10 percent matching funds." *Government Operations Hearing*, *supra* note 42, at 76 (prepared statement of Dr. Hoel S. Hirschhorn, Senior Associate, Office of Technology Assessment). EPA's *50-State Study* similarly casts doubt on the adequacy of states' financial resources, reporting, with several qualifications as to the accuracy of its financial information, that 13 states have less than $1 million, and 14 states have from $1 million up to $5 million. 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 21, 22.

As this discussion suggests, although level state and federal cost shares for both construction and O & M costs throughout the remedial process make sense, pros and cons exist for any particular percentage each government must contribute. The appropriate level of cost share is an issue that deserves separate consideration and warrants developing additional information.

and the states feel they have the same stake is a good idea."[162]

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162. Another aspect of the O & M issue that some interviewees raised involves what happens, and what should happen, if a state fails to meet its O & M commitment. Under CERCLA, a state's failure to pay its share of the cleanup costs means, at least potentially, that EPA will assign lower priority to other sites in that state. *See* CERCLA § 105(A)(8)(a), 42 U.S.C. § 9605(a)(8)(A) (1988) ("State preparedness to assume State costs and responsibilities" is a factor in determining response priorities among NPL sites).

The issue of whether states are meeting their O & M obligations deserves more systematic inquiry. As construction is completed at increasing numbers of sites, the issue of O & M and how its implementation problems should be handled will assume increasing significance.

A final issue relating to the problem of differential cost shares concerns post-ROD issues regarding changing the remedy and the design. CERCLA provides two alternative mechanisms for EPA to use when it alters a remedy after the ROD is signed. First, if the remedy will be "significantly different," EPA must issue an Explanation of Significant Differences ("ESD"). 40 C.F.R. § 300.435(c)(2)(i) (1992). A "significant difference" is one that may alter the scope or the cost of the remedy, but does not recast the basic remedial approach. *See id.*

One state official said that this procedure has been a source of considerable concern for several states. He explained that by its terms, the altered remedy is significantly different from the remedy selected in the ROD. This difference creates problems because it limits states' rights to participate in the process of selecting this significantly different remedy. The implications are such that for fund-lead sites, if a state has concurred in a ROD and made the requisite funding and other commitments, and EPA later issues an ESD, the state remains bound to fulfill its commitments in terms of this new remedy. This obligation exists even though the ESD could potentially, for example, significantly alter the nature of the remedy and the extent of the state's financial contribution. For example, an ESD might reduce the construction associated with a particular remedy and increase the anticipated O & M, resulting in significant financial detriment to a state; yet, according to a state official interviewee, a state would be hard pressed to revoke its earlier commitment which it made based on the original ROD. A federal official downplayed this state concern, indicating that changes in the remedy can be dealt with in the drafting of the state Superfund contract. As a matter of fairness and in the interest of "team building," the federal government seriously should consider affording states the same right to participate in EPA's selection of significantly different remedies as the right they possess in the remedy selection process.

Second, the "design phase" follows issuance of the ROD. *See* 40 C.F.R. § 300.435(b). Two interviewees, one state official and one federal official, indicated that similar to the ESD situation, the design process can result in significant cost changes. These changes leave no recourse to states which have already made commitments regarding their 10% share of construction costs and 100% share of O & M costs. The state official reported several situations in which engineering work during the design phase shifted costs from the construction of the remedy to its O & M, thereby

F. *Finding Six: A need exists to improve the "team concept" and foster mutual respect.*

Interviewees stressed that a major area that needs improvement involves the attitudes of the government officials toward each other. Several interviewees cited a need to improve the attitudes of the federal and state players so that they will begin to act as though they are partners on a team instead of adversaries. One official said that "states act like oppressed people" and that "people [from the federal and state governments] feel like they're adversaries, not working together."

This issue permeates many of the problems in the federal/state relationship discussed in this Article. Taking the steps outlined above would help to dissipate some of this tension. For example, changing the structure of the federal program to eliminate financial incentives for conflict would improve the relationship between the two levels of government.[163]

Similarly, as one federal official articulated, "No one likes to be in a subordinate position." Developing a more horizontal type of relationship, in which states are encouraged to take full responsibility for sites, would build a sense of equality rather than a sense of subordination and superiority. This approach would be better than the current, more vertical relationship which is characterized by EPA looking over the states' shoulders when states take action at sites, and by states' reviewing and commenting when EPA has the lead. This approach also would help to shift attitudes like that of one interviewee, who said, "It is difficult to keep the state managers within their state role. The state role is reviewing and commenting."

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increasing the state's financial obligation. Both officials noted the possibility that this opportunity for the federal government to change the remedy unilaterally, with no state input, creates at least the potential for accusations of bad faith by state officials, especially given the disparity in cost share for the construction and O & M phases. By revising the cost share structure, the federal government will help ensure that unanticipated developments during the design do not cause unnecessary friction or ill will between the federal and state governments.

163. *See supra* Section II.E. A related issue is that if the federal government maintains a state cost share, it should allow state participation in the ESD process and in authorizing significant changes to the design. *See supra* note 162.

Finally, as noted above,[164] some federal officials criticized the states for being irresponsible in the remedy selection process. Revamping CERCLA's provisions regarding state ARARs, by making federal standards the floor and allowing states to require enhancements if they will pay for them or are able to convince or require PRPs to do so, would contribute to reducing the significance of this issue.[165]

G. *Finding Seven: The federal government should take several other actions to improve the federal/state partnership.*

1. *The federal government should change the law on state cost share at municipal sites.*

The federal government should change the fifty percent state cost share for Superfund municipal sites.[166] One state official said that "neither the state nor the municipality can give matching dollars at Superfund municipal sites." A federal official made the same point, stating that no good rationale exists for establishing a unique cost share for these sites and that such a unique cost share "distorts the process," especially if the state had little, if anything, to do with the creation of the

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164. *See supra* notes 139-43 and accompanying text (discussing the issue of states "playing with free money," that is, urging remedies without finding a way to pay for them).

165. *See supra* note 142 and accompanying text.

166. *See* CERCLA § 104(c)(3)(C)(ii), 42 U.S.C. § 9604(c)(3)(C)(ii) (1988). This section states:

> The President shall not provide any remedial actions pursuant to this section unless the State in which the release occurs first enters into a contract or cooperative agreement with the President providing assurances deemed adequate by the President that ... the State will pay or assure payment of ... 50 percent ... of any sums expended in response to a release at a facility, that was operated by the State or a political subdivision thereof, either directly or through a contractual relationship or otherwise, at the time of any disposal of hazardous substances therein.

Id. This section covers sites "operated by a State or political subdivision thereof" and therefore covers more than merely "municipal sites." *Id.* The state cost share for such sites currently is a minimum of 50%. *Id.* This figure contrasts with the state's 10% cost share for other Fund-lead federal NPL sites. *Id.* § 104(c)(3)(C)(i), 42 U.S.C. § 9604(c)(3)(C)(i).

site.

2. *The federal government needs to improve communication of information.*

EPA Headquarters needs to change fundamentally its method of communicating with the EPA regions and the states. Currently, and traditionally, EPA Headquarters issues guidance documents to provide policy direction.[167] The adequacy of this EPA guidance received considerable attention during the interviews. One interviewee expressed the very strong consensus that such EPA guidance is of limited value, stating that "guidance gets very short shrift in our region."[168] Former EPA General Counsel Donald Elliott similarly challenged the usefulness of EPA guidance:

> James Landis, the father of American administrative law, once wrote that developing simple, "effective routines" is the key to good administration. Unfortunately, however, for all its volume and complexity, our enormous and unwieldy body of law and administrative practice under Superfund fails to provide clear guidance that can be administered efficiently and predictably.[169]

EPA needs to take a hard look at its use of guidance documents as a mechanism for communicating between Headquarters and regions, and in the context of federal/state relations. EPA should explore ways to refine the guidance system.[170] In addition, as one interviewee suggested, EPA should consider providing more training as a method to improve communication.

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167. As of 1989, more than 200 such documents existed for the federal Superfund program alone. 90-DAY STUDY, *supra note* 30, at 3-27.

168. *See* COMING CLEAN *supra* note 38, at 14 (OTA noting the "young, inexperienced" nature of the government workforce, and recommending that Superfund's managers provide this workforce "with better information and technical assistance, more explicit policies, and closer supervision").

169. Elliott, *supra* note 47, at 12.

170. *See* 90-DAY STUDY, *supra* note 30, at 3-27 (finding that "[e]xisting ... guidance ... is generally too long and detailed for its intended purpose and is often not easily accessible").

3. *The federal government needs to convince the states they can trust EPA concerning federal facilities.*

Several state officials noted that one source of tension between EPA and the states stems from EPA's "not having its own federal house in order." They said that EPA does not require much of federal facilities,[171] and these low standards create general distrust. The state perspective is that, in order to protect the United States Department of Defense and the United States Department of Energy, EPA is reluctant to honor state standards. The states view EPA as reluctant to enforce agreements with federal facilities. EPA needs to convince the states that it is being effective and consistent in its dealings with other federal agencies.[172]

4. *The federal government needs to change its approach if it wants states to participate as intended in ensuring a comprehensive inventory of potential sites.*

The CERCLA Information System ("CERCLIS") is EPA's database for potential hazardous waste sites.[173] EPA designed the database to be a comprehensive list of contaminated sites potentially in

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171. CERCLA actions at federal facilities are covered by CERCLA § 120, 42 U.S.C. § 9620 (1988). Section 120 delegates the majority of the CERCLA process to the agency or department owning or operating the facility, including the RI/FS and the cleanup. CERCLA § 120(e)(1)-(2), 42 U.S.C. § 9620(e)(1)-(2).

172. Evaluating the merits of state complaints in this area is beyond the scope of this Article. Four aspects of this issue, however, warrant mention. First, according to a report in an environmental newsletter, an upcoming United States General Accounting Office report is critical of the slow pace at which EPA is evaluating federal facilities. *Upcoming Report Says EPA Failed to Inspect Hundreds of Contaminated Sites*, SUPERFUND REP., Mar. 10, 1993, at 14. Currently, there are 1900 federal sites awaiting investigation. *Id.* Second, for those federal facilities that are on the NCP, EPA needs to negotiate enforceable agreements obligating the relevant federal agency to conduct a comprehensive and timely investigation and cleanup. Third, EPA needs to monitor compliance with such agreements closely and pursue enforcement (through collection of stipulated penalties and otherwise, when significant non-compliance occurs). Finally, EPA needs to ensure that interested states are able to play an integral role in (1) negotiating such agreements and (2) monitoring for and pursuing non-compliance.

173. *See generally* OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. ENVTL. PROTECTION AGENCY, PUB. NO. 9345.1-09-0, SUPERFUND NPL CHARACTERIZATION PROJECT: NATIONAL RESULTS (Nov. 1991) (describing CERCLIS and the other components of EPA's site assessment program).

need of cleanup. EPA investigates contaminated or potentially contaminated areas listed on CERCLIS to determine whether it should devote further attention to the site under Superfund.[174] CERCLIS currently includes more than 36,000 sites.[175]

The state role in connection with CERCLIS is fairly straightforward. States have the opportunity to nominate sites for listing on CERCLIS to their EPA region.[176]

Several EPA and state officials reported that states do not nominate all potential sites for inclusion on CERCLIS, primarily because once a site is on CERCLIS the site is "stigmatized."[177] In its 1989 report, GAO found that twenty-six percent of the non-NPL sites that states had identified were not listed on CERCLIS.[178] Officials from one state said that they did not nominate a single site during the past year. An official from another state said that many states maintain two lists -- one for sites that they report to EPA and another "unofficial" list of sites that they do not report for inclusion on CERCLIS. Interviewees indicated that among other disadvantages, banks are extremely wary of lending money on property listed on CERCLIS.

Despite its having a total of more than 36,000 sites, CERCLIS is not fulfilling its intended function of serving as a comprehensive list of potential hazardous substance sites that require remediation. States are responsible for this divorce between goal and reality because of their deliberate selectivity in nominating sites for inclusion on the CERCLIS data base. CERCLIS, therefore, should not necessarily be considered a proxy for the actual scope of the potential hazardous waste site problem in the United States.

The federal government has tried to resolve the stigma issue but has not succeeded. As noted previously, governments commonly

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174. OTA calculated that a cumulative rate of nine percent of CERCLIS sites made the NPL between 1983 and 1988. COMING CLEAN, *supra* note 38, at 127.

175. *See* ENVIRONMENTAL FACT SHEET, *supra* note 49 (noting that CERCLIS contained 36,814 potential sites as of January 1993).

176. EPA obtains recommendations for listing sites on CERCLIS from other sources as well. *See* CERCLA § 103(a), 42 U.S.C. § 9603(a) (1988) (requiring facilities to notify EPA of any non-permitted releases of hazardous substances); *see also id.* § 105(d), 42 U.S.C. § 9605(d) (allowing citizens to petition EPA to investigate a suspected release or threatened release of a hazardous substance).

177. *See* COMING CLEAN, *supra* note 38, at 99 (finding that states do not report all potential sites to EPA for a variety of reasons).

178. STATE CLEANUP STATUS, *supra* note 42, at 21.

acknowledge that a perceived stigma is associated with CERCLIS listing. This stigma influences states' behavior.[179] Consequently, if the objective is for states to help make CERCLIS comprehensive, the federal government needs to take further action to reduce the stigma associated with CERCLIS listing.

III. ALTERNATIVE FRAMEWORKS FOR THE FEDERAL/STATE RELATIONSHIP

The existing framework for federal/state relations in the hazardous waste site arena contains three key elements. First, the federal Superfund program focuses on a relatively small subset of the total number of hazardous waste sites throughout the country that need cleanup action.[180] Second, the federal government plays the dominant role in addressing these sites, with states playing a more or less active subordinate role.[181] Third, states bear the primary responsibility for addressing the other sites that need attention.[182]

Findings Two through Seven contain recommendations for improving the federal/state relationship within this framework ("Status

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179. A concern over stigma associated with CERCLIS listing appears to have been raised during the development of the 1990 NCP. Based on the preamble to the NCP, EPA's position seems to be that it has taken adequate steps to reduce any stigma associated with CERCLIS listing by (1) creating a special designation, the No Further Response Action Planned designation, for sites that EPA has investigated and determined do not warrant further action, and (2) stating explicitly in the regulation that "[i]nclusion of a specific site or area in the CERCLIS database does not represent a determination of any party's liability, nor does it represent a finding that any response action is necessary." 55 Fed. Reg. 8692 (1990). Placement on state Superfund lists probably carries a stigma as well. The anecdotal information from the interviews is that "making the federal program" creates an additional burden.

180. *See supra* notes 66-67 and accompanying text. While the EPA removal program addresses non-NPL sites as well as NPL sites, the vast majority of EPA attention and resources are devoted to the remedial program, which focuses on NPL sites. For example, in FY 1992, EPA obligated $145,000,000 for removal actions compared to $569,000,000 for remedial actions. U.S. ENVTL. PROTECTION AGENCY, CERCLIS DATA BASE (June 21, 1993).

181. *See supra* notes 100-04 and accompanying text (recommending that EPA encourage a more active state role in the federal Superfund program).

182. For a description of one state's Superfund program, see Markell & Tuohy, *supra* note 42; *see also* Markell, *supra* note 42, at 3.

Quo Model").[183] This Section discusses the possibility of a more radical shift in federal/state relations, highlighting three alternative frameworks for the federal/state relationship in the federal Superfund program.

A. *Alternative One: "The Delegation Model"*

The Delegation Model contains elements one and three from the Status Quo Model but differs from the Status Quo Model with respect to element two. The federal Superfund program would continue to focus on a relatively small subset of the total number of sites that need cleanup action, and states would continue to bear the major responsibility for non-federal sites. The Delegation Model would alter element two, creating the *expectation* that EPA would delegate authority to the states to address federal sites in addition to non-federal sites.[184] Under this model, the federal role in administering cleanups even at federal NPL sites would become much more limited.

Adopting and implementing this option effectively would transform the Superfund program into a "delegated" program along the

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183. The *90-Day Study* concluded that "[t]he basic structure of the Superfund program is sound and should be retained." 90-DAY STUDY, *supra* note 30, at 1-14. The authors of the Study and then Administrator Reilly believed that making "major structural changes" to the Superfund program would be "disruptive, counterproductive, and unnecessary." *Id.* OTA also seems to favor a more gradual integration of states rather than a radical transfer of responsibilities from EPA to the states in the near future. COMING CLEAN, *supra* note 38, at 62.

184. *See supra* Sectiom II. Section II also recommends that the federal government actively solicit and encourage a greater level of state involvement in the federal Superfund program. The difference between the proposals for change in Section II and Alternative One is that with the former, the expectation is to maintain the federal government's Superfund infrastructure while more efficiently and completely integrating states into the program. Alternative One represents a more radical restructuring in that presumably, as states are delegated authority, the federal government would dismantle significant components of its own infrastructure. Depending on implementation, the two models in fact could produce a similar shift in responsibilities from EPA to the states. The issue arises as to how completely Alternative One could be implemented. Almost 10 years after the enactment of the 1984 amendments to RCRA, only 15 states have delegated authority to implement these amendments. For a discussion of the problem of the inability of more than a relatively small number of states to gain delegation, see *infra* note 193.

lines of the Clean Water Act[185] and RCRA.[186] Several commentators support such a radical shift.[187]

Officials assert general reasons for making such a radical shift. First, as one interviewee stated, "You should define the problem first and

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185. 33 U.S.C. §§ 1251-1387 (1988 & Supp. IV 1992); *see id.* § 1342(b) (giving EPA authority to delegate the permit program).

186. 42 U.S.C. §§ 6901-6992k (1988 & Supp. III 1991); *see id.* § 6991c (giving EPA authority to delegate the Underground Storage Tank program). Under these programs, delegated states become the primary government actor. EPA becomes an overseer. Under the Clean Water Act, for example, delegated states issue permits, and EPA reviews the permits. EPA has the authority and responsibility to veto inadequate permits. 33 U.S.C. § 1342(d) (1988); 40 C.F.R. § 123.44 (1992); Save the Bay, Inc. v. EPA, 556 F.2d 1282, 1285-87 (5th Cir. 1977). If EPA concludes that the state is implementing the entire program inadequately, EPA may withdraw the program. *Id.* at 1285.

In the enforcement context, states also play the primary role. OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING, U.S. ENVTL. PROTECTION AGENCY, REVISED POLICY FRAMEWORK FOR STATE/EPA ENFORCEMENT AGREEMENTS 1 (Aug. 1986). While EPA maintains that it retains complete, unfettered enforcement authority in delegated states, *see* A. JAMES BARNES, DEPUTY ADMINISTRATOR, U.S. ENVTL. PROTECTION AGENCY, GUIDANCE ON RCRA OVERFILING 1 (May 1986), courts have not uniformly accepted this position. *See, e.g.*, United States v. ITT-Rayonier, Inc., 627 F.2d 996 (9th Cir. 1980); United States v. Cargill, Inc., 508 F. Supp. 734 (D. Del. 1981).

187. *Cf.* RIVLIN, *supra* note 2, at 117. Rivlin, approaching the issue from a different perspective than most of the interviewees. He supports delegating most environmental programs to states. She states that Washington, D.C., lacks the managerial capacity to address these problems while also performing its most important and unique functions. These functions include balancing the federal budget and reducing the federal deficit, which Rivlin believes are critical to the nation's long-term economic health, and managing international responsibilities. She suggests that "[i]t would be better to divide the job, focus the energies of the federal government on the parts of the task for which it has a distinct advantage, and rely on the states for activities they are more likely to carry out successfully." *Id.*

Rivlin recommends that existing federal programs should be devolved to the states or should gradually wither away, and believes that this devolution would help reduce future pressure on the federal deficit. *Id.* at 119. She notes that important areas exist in which cooperative federalism is necessary and desirable. One significant area is environmental protection, especially because "[m]any hazards to the environment cross state lines and cannot be satisfactorily dealt with by states and localities acting alone." *Id.* Based upon her philosophy toward federalism, Rivlin likely would support delegating authority for the Superfund program to the states, at least in theory, because hazardous waste sites generally are a local concern and do not cause interstate pollution problems.

then establish a structure that is designed to address the problem." Here, the "problem" is 30,000-plus sites. Dividing these sites into different categories and maintaining redundant bureaucracies at the federal and state levels makes no sense. The size of the problem shows that the federal government cannot handle the federal sites alone. Therefore, states should have authority to address federal sites. Another interviewee endorsed delegation by indicating that with regard to the Underground Storage Tank ("UST") program,[188] delegation became the obvious option "as soon as people knew there were 100,000 tanks." He opined that it was pre-ordained that the size of the UST universe would become so large that the federal government could not handle the problem. He urged that a similar situation exists in the CERCLA context.[189]

Second, many of the considerations involving the appropriate remediation of these sites focus on future land use. Officials ask questions about issues such as (1) whether government should write off the site so that no one can use it and (2) whether the government should

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188. 42 U.S.C.S. § 6991-6991i (1988 & Supp. III 1991).

189. *See* Env't Rep. (BNA) 2901 (Dec. 25, 1992) (summarizing the magnitude of the UST program and citing a report that concluded that the cost of removing underground storage tanks and cleaning up soil and ground water they have contaminated could cost more than $41 billion and "take more than 30 years to complete"). Projections for the Superfund program in terms of total cost and time frame are similar. *See supra* note 36. On this point, several federal officials complained about the failure at the national level to acknowledge publicly the true scope of the hazardous waste sites problem. One official said that "we need to establish the universe of need." She added that the construction grants program conducted "need surveys" to learn what the municipalities needed to establish or upgrade their water treatment plants, but that no similar "universe of need" has been established under CERCLA.

The Congressional approach in the Oil Pollution Act of 1990 ("OPA"), 33 U.S.C. §§ 2701-2761 (Supp. II 1990), is in stark contrast to the approach Congress adopted for the UST program, despite the fact that OPA's regulatory universe similarly is enormous. In OPA, Congress did not allow states to take the lead role in responding to oil spills or in reviewing the many thousands of "response plans" that OPA requires oil storage facilities, pipelines and vessels to submit. One EPA official estimated that several hundred thousand such facilities, pipelines and vessels exist, and he noted that the federal government, which Congress mandated to review these plans, lacks the resources to do a comprehensive, timely review. For example, the United States Department of Transportation, Office of Pipeline Safety, which is responsible under OPA for reviewing several thousand pipeline response plans, has a total of six people for all pipeline office compliance work. Telephone Interview with Stephen Luftig, Acting Deputy Director, Office of Emergency and Remedial Response, U.S. Envtl. Protection Agency (July 7, 1993).

clean up the site so that it is available for commercial or residential use. Historically, land use is a matter primarily of local concern. Land use decisions in the CERCLA context should also be local.

Third, delegation leverages resources by utilizing state resources in addition to federal resources. Delegation also should increase the number of "innovation centers" -- places where people think creatively -- and thereby increases the likelihood of generating good ideas.[190]

Fourth, a related concern is that EPA is overloaded with too much work. EPA should delegate cleanup to the states that have the capability to handle the cleanup program.

Fifth, delegation of the program would produce greater community acceptance. The program will have greater credibility if citizens believe their own people, not faceless federal bureaucrats, are making the decisions.

Sixth, within a particular state, one set of rules would exist and one agency would be accountable. Finally, if oversight is limited, delegation would reduce duplication of effort.[191]

Several reasons exist for opposing the delegation option and retaining a substantial federal role. First, the federal Superfund program is finally producing results. EPA is moving sites through the system. Demobilization of the federal infrastructure, therefore, does not make sense now that the federal system is making progress.

Second, more than enough work exists for both governments. The de facto division of responsibility that has evolved in many states has produced a reasonable accommodation of the various governments' interests.

Third, delegation is premature at this time. CERCLA is still a young program, having only operated for the past few years.[192] Major

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190. *Cf.* New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (finding that states may operate as "laboratories of social and economic experiments without risk to the rest of the country").

191. Most of these reasons for adopting a "delegation" approach also support making the changes suggested in Section II.

192. Because of problems during the early years of the program, and due to the failure to reauthorize CERCLA promptly in 1985, causing a virtual one-year halt to Superfund work, many government officials suggest that the program has gotten on track only in the past few years. As the OTA concludes, delay in Congressional reauthorization in federal FY 86 had a "significant disruptive impact on Superfund implementation." COMING CLEAN, *supra* note 38, at 9 n.2. OTA also concludes that as of 1989, "after nearly a decade, Superfund is still in its experimental stages." *Id.* at 27.

issues remain unresolved. In fact, many issues still come to EPA Headquarters for decision. As one interviewee stated, "program contours should be better delimited" before delegation occurs.

Fourth, adopting a structure that contemplates delegation is premature because, according to several EPA and state officials, relatively few states would want or could handle full delegation.[193] In fact, one state official from a major state said that he thought that unless a large infusion of federal funds came with delegation, "a state would have to be crazy to accept delegation" given states' extensive non-NPL responsibilities. Another state official, also from one of the major states, similarly stated that he did not think his state would want delegation because he anticipated considerable EPA oversight given the large

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193. EPA reports that at some sites where states have taken the lead role in Fund-financed RI/FSs, quality problems and delays have arisen because some states do not have successful cleanup programs. 90-DAY STUDY, *supra* note 30, at 3-25, 3-26. EPA has noted that "[t]he prospects for increasing State involvement at both NPL and non-NPL sites depend on the willingness and capacity of States to develop effective programs, and obtain adequate State resources to fund cleanups, pursue enforcement to obtain private cleanups, and conduct oversight activities." 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 1. OTA has concluded that "State participation in current Superfund implementation ... has not been especially successful," COMING CLEAN, *supra* note 38, at 62, and that "few States have effective cleanup programs." *Id.* at 13. OTA has found that "[s]ome of the most important aspects of Superfund are missing in other cleanup programs; for example, in other cleanup efforts there typically is no preference for permanent cleanups, less opportunity for effective public participation in the entire cleanup process, less attention to all significant risks to both health and environment, and less public accountability." *Id.* at 13; *see also id.* at 64-65.

For a summary of GAO's, OTA's and EPA's concerns regarding states taking responsibility for Superfund sites, see *supra* notes 53-64 and accompanying text; *see also Government Operations Hearing*, *supra* note 42, at 9 (prepared statement of Richard L. Hembra, Director of GAO's Environmental Protection Issues, Resources, Community, and Economic Development Division) ("The ability of most states to handle the cleanup of larger, more complex sites is unproven. Most states have limited hazardous waste cleanup experience and several have small programs"). GAO indicates that the well-established states which GAO covered recognized that "cleaning up all of the present sites ... will take ... more resources than are now available in their states." STATE CLEANUP STATUS, *supra* note 42, at 20. In the states that GAO covered with "evolving" programs, the "states generally recognize that the size of their hazardous waste site problem is much greater than their present programs can handle." *Id.* Based on the GAO survey and the interviews the author conducted, many states have neither the interest nor the capability to take responsibility for a significant number of NPL sites. On the other hand, a limited number of states appear to have both the requisite interest and capability.

amount of money involved.[194]

Fifth, many people criticized the program for the current inconsistency among the ten regions.[195] The level of inconsistency will increase dramatically if the program is delegated. Some interviewees pointed to the UST program as an example of this inconsistency, contending that under the UST program each state in reality selects its own cleanup standards with little involvement from EPA, creating rampant inconsistency. One interviewee said that "it is hard to envision delegating the program without changing its nature. Among other things, we would need to standardize remedies."[196]

One downside resulting from a structure that institutionalizes inconsistency is that large companies with facilities throughout the United States would need to follow different procedures and meet different requirements to address similar problems, leading to inefficiencies and confusion. On the other hand, some interviewees rejected the idea that inconsistency is necessarily bad, arguing instead that each state should have the autonomy to make its own cleanup decisions. These interviewees emphasized that the state, its citizens and industry are those groups which will be most immediately affected by such decisions.[197]

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194. Another state official from one of the ten states with more than 100 employees devoted to waste activities said that although overall she favored delegation, she did not "think that delegation is likely in [her state] because they don't want the Superfund 'taint.'" She continued that "the relationship [between EPA and the state] is about as good as it ever has been ... [and that t]his improvement is because of a sense of partnership." She said she is "almost fearful of losing that partnership if Superfund was delegated to the states." Other state officials disagreed with this assessment.

195. *See, e.g.*, COMING CLEAN, *supra* note 38, at Box 1-C. OTA notes that a "major cause of unnecessarily high or avoidable costs for prolonged negotiations and litigation is the excessive flexibility inherent in the current program." *Id.* "[T]he high level of autonomy given to EPA Regions, coupled with ineffective central management oversight and control by EPA headquarters mean that cleanup decisions are often vulnerable to challenge because they are inconsistent with EPA policies or statutory requirements." *Id.*

196. GAO similarly urged against allowing deferral without requiring states to comply with the NCP, including its remedy selection requirements, as a condition for such deferral. STATE CLEANUP STATUS, *supra* note 42, at 67.

197. *See supra* text following note 189. This issue is a fundamental policy question. A primary concern that GAO and OTA expressed with increased state involvement is a risk of inconsistent, and in some cases less protective, remedies. As EPA's Bruce Diamond suggested, *see supra* note 41, the issue of the state role is "interwoven" with other aspects of the program, such as the issue of "How clean is clean?"

Sixth, interviewees offered three related criticisms: (1) The amount of money involved in Superfund would "distort the process" because states would want the program even if they were not capable; (2) EPA would be under "irresistible pressure" to approve states even though most states could not handle the program; and (3) EPA never takes back programs once it delegates them.[198]

Seventh, EPA should have the responsibility if EPA will receive the blame. The interviewee who offered this point said that Lee Thomas told Congress several years ago: Either let me run the program, or give it to the states.

Finally, one official said that with delegated programs, competence typically emerges over time, but added that this competence emerges only if a substantial increase in funding occurs. This official noted that the issue of unfunded mandates to the states has become a major concern[199] and that providing states with significant additional funding to meet program mandates may prove impossible and thereby sabotage a delegated program approach.[200] Additional funding

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198. One federal official stressed the need for a middle level sanction, between "reprimanding letters and countless meetings" and withdrawal of the program, if a delegation model is adopted. She also suggested creation of a "Superfund federal reserve fund" that would be available, together with expedited hiring authority, if EPA needed to withdraw a program.

An example of EPA's inability to penalize states that are unable to meet environmental requirements is currently being played out in the capacity assurance plan ("CAP") process. The CAP process involves states' obligations to submit CAPs, specifying how the state intends to meet its capacity needs for hazardous waste disposal for the next 20 years. *See* CERCLA § 105(8), 42 U.S.C. § 9605(8) (1988). A state loses federal Superfund dollars if a state fails to plan adequate capacity to meet its projected hazardous waste disposal needs. *Id.* EPA is responsible for reviewing these CAPs and making the eligibility determination in terms of Superfund dollars. *Id.* Despite a failure by several states to develop or submit CAPs that realistically will provide adequate disposal capacity, EPA has failed to impose the statutorily-mandated sanction. This issue is currently being litigated. *See* New York v. Reilly, 143 F.R.D. 487 (N.D.N.Y. 1992).

199. *See also* RIVLIN, *supra* note 2, at 107-09. Rivlin notes that "state and local officials [have become] increasingly strident in criticizing federal mandates." *Id.* at 108.

200. *See supra* note 113. The federal government needs to resolve other issues in addition to deciding (1) the criteria the federal government should use to determine which states are "capable" of being delegated, (2) the type of oversight the federal government should exercise, and (3) the types of federal authorities delegated states should be able to use. *See supra* note 116 (discussing these issues).

First, the government must confront the issue of dealing with *transition* if a delegation approach is adopted. Many interviewees stated their view that relatively few states currently are capable of or interested in delegation. This anecdotal evidence appears to have support in the GAO, OTA and EPA studies of state capability. *See supra* text accompanying note 193; *see also supra* Section II.A. Consequently, if the government adopts a "delegation" model pursuant to which states are expected to handle sites from start to finish, realistically, relatively few states could be expected to receive delegation within the next few years.

Another sentiment that several officials strongly urged is that the federal program has finally turned the corner and is working. They recommended that any delegation, therefore, provide for a transition that would minimize the disruption in the existing program and avoid undermining its recent successes.

Related to the idea of a transition is the concept of a "phased in" or "segmented" delegation. *See supra* Sections II.B-D. This concept delegates the functions, not entire sites, or provides for states taking responsibility for a limited number of sites, with the specific sites delegated based on particular criteria.

Second, a need exists to ensure that a move to a delegated program, if such a program includes access to the federal Superfund, benefits from the lessons learned in the UST and construction grants programs. Both of these programs also involve federal grants. Some interviewees said that UST seems to be working well. Others indicated that UST "has let go of national consistency. Each state sets its own standards" One state interviewee said that the UST and Superfund programs create an "anomaly." He said that if a gas station is next to a Superfund site, the government will treat the plume from the site much more than it will treat the gasoline plume, even if the latter is worse from an environmental or health standpoint. His explanation was that "UST is a high volume operation and states have flexibility not to clean up as much. If Superfund standards were applied [to UST situations], we would spend lots more money." *See supra* notes 95-97 and accompanying text (suggesting that EPA should consider whether to standardize remedies to a greater extent as a part of any delegation). The explanation also relates to the point that the federal/state relationship issue is inextricably linked to the resolution of substantive issues such as "How clean is clean?" *See supra* note 35 and accompanying text.

Third, in addition to oversight, the federal government should perform other functions. Widespread agreement seemed to exist among the interviewees that EPA could and should play a valuable role in certain areas: promoting the development of cleanup technologies, developing consistent cleanup standards, serving as a clearinghouse for information on cleanup technologies and supporting the development of capable state programs. One interviewee expressed a view echoed by others when he said that EPA "needs to put a lot more focus on R & D." One suggestion in this regard was that EPA expand the use of personnel transfers under the Intergovernmental Personnel Act so that EPA personnel could work in state offices to help states establish sound programs and to nip problems in the bud. *Government Operations Hearing, supra* note 42, at 202. The Core program cooperative agreement funding arrangement is an existing mechanism for helping to build state Superfund capacity. One option is to expand this program.

problems could be alleviated to a certain extent, however, if EPA reallocated the current level of funding of state programs from support functions to state infrastructure development and to sites where states have the lead.

The results of GAO's state survey reflect the interviewees' views that states believe that EPA assistance could be most helpful in the areas of setting cleanup levels and selecting remedies, including "more assistance with health effects data, reports on new treatment techniques, training for state personnel on treatment technologies, and training on choosing remedies." STATE CLEANUP STATUS, *supra* note 42, at 54. *See also* Paula A. Sinozich, *Project: The Role of Preemption in Administrative Law*, 45 ADMIN. L. REV. 107, 211 (Spring 1993) ("From an efficiency perspective, the federal government is better equipped than the states to undertake some necessary aspects of hazardous waste control. For instance, economies of scale exist with respect to research and development of technologies for controlling and reducing hazardous waste").

Fourth, the government must decide what *type* of delegation would be appropriate. Options include (a) authorization, the approach followed in the Clean Water Act, in which a state adopts adequate state authority to implement the program and then administers the program under state law, or (b) delegation, the approach followed to some extent in the Medical Waste Tracking Act of 1988, 42 U.S.C. § 6992 (1988) (giving a state authority to implement federal law directly). Finally, the government must determine what process it should establish for delegation. One state official suggested a "self-certification" *process*, in which the state would self-certify that it is capable of administering the program. A second option, urged by several federal officials, is to use a rulemaking process similar to that used in the Clean Water Act. In this process, the state applies for authority to implement the program based on specified criteria, providing a comprehensive description of its program and a certification by the state's Attorney General that the state has adequate legal authority to implement the program. The state then provides an opportunity for public comment on the merits of this delegation/authorization. One citizen representative strongly endorsed the latter approach. A federal official also endorsed this approach, arguing that "with the amount of money involved, authorizations deserve heightened scrutiny."

Several interviewees agreed that RCRA was "how not to do it." They said that after nine years, a total of 15 states had received delegation, and all parties suffered from the burdens of delegation.

The decision on "process," including the related issue of who has the burden of proof in determining whether a state should be authorized to implement various aspects of the federal Superfund program, will play a key role in the ultimate shape of the program and the states' ultimate role. *Cf.* Belsky, *supra* note 3, at 61-62 (prior to the Reagan administration, a federal program was not delegated unless a state had the capability to meet the federal standards, but the Reagan administration shifted the process and the burden of proof in favor of delegation, believing that a program should be delegated unless the state is clearly shown to lack the authority or ability to carry out its responsibilities).

B. *Alternative Two: "The Clean Break Model"*

The "Clean Break Model" contains elements one and three from the first two models. This model differs with respect to element two in that the states' role in handling federal NPL sites would be eliminated or, at a minimum, greatly circumscribed. Currently, even though the federal government normally takes the lead at most federal sites, CERCLA guarantees states the right to play a "substantial and meaningful" role.[201] CERCLA also imposes significant responsibilities on states, such as the obligation to provide part of the funding when sites need to be cleaned up with government monies.[202] Under this model, states' rights and responsibilities would be limited significantly.[203]

C. *Alternative Three: "The Comprehensive List Model"*

The "Comprehensive List Model" eliminates the concept of two lists of sites. One interviewee called the NPL an "artificial construct," adding that "[the sites] are all contaminated and need work."[204] One federal interviewee said that the analysis of the hazardous site problem should contain three steps: (1) defining the problem; (2) defining success, in terms of how many studies or how many cleanups; and (3) formulating a federal/state approach that will create the highest probability of success. He said that his sense is that the NPL will remain at a "pre-ordained size" due to funding and budgetary issues. He found that the benefit is that the program will ultimately "get out from under the idea of failure" as it focuses on a limited universe of sites and moves

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201. *See supra* note 110 and accompanying text.

202. *See generally* CERCLA § 104, 42 U.S.C. § 9604 (1988); *see also supra* notes 154-62 and accompanying text.

203. Those interviewees who discussed the issue agreed that politically, the Clean Break Model would never survive.

204. OTA similarly concluded that EPA "has subordinated the environmental mission of the [Superfund] program ... by, for example, limiting the number of sites placed on the National Priorities List." COMING CLEAN, *supra* note 38, at 10. OTA also concluded that "[t]he cutoff score of 28.50 has no technical basis. It is an arbitrary number ... ." *Id.* at 116. The OTA report noted that "[t]he number [28.50] was selected in 1982 to come as close as possible to the 'at least 400 sites' required by CERCLA for the first list." *Id.*; *see also Government Operations Hearing*, *supra* note 42, at 144 (testimony of Dr. Joel S. Hirschhorn). OTA identified one option of putting all sites on the NPL instead of a "massive deferral" of sites to other programs. COMING CLEAN, *supra* note 38, at 11.

them through the process. He criticized this approach by saying that the NPL is not an "honest reflection of the size of the problem."[205] He elaborated that we should measure success by the time it takes EPA to deal with the problem, beginning from the moment EPA receives a call that a problem exists. He noted that the current "steady state" model is destined to fail if this is the primary measure of success.

Under the Comprehensive List Model, instead of this artificial construct, the federal and state governments, working together with their existing resources,[206] would develop a comprehensive inventory of sites needing attention, prioritize these sites, and divide them so that the federal government would be responsible for some cleanups and state governments would be responsible for the others.[207]

A modified version of the Comprehensive List Model involves eliminating the NPL and dismantling the bulk of the federal Superfund infrastructure. Resources from this infrastructure, such as the 3500 plus

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205. As OTA has noted, years of research and analysis of Hazard Ranking System has found that it cannot reliably make fine distinctions from site to site: "[T]he current cut off score of 28.50 for placement on the NPL ... was set on non-environmental grounds." COMING CLEAN, *supra* note 38, at 63. As OTA points out, the "use of a single score for the entire history of an NPL site doesn't mean much technically or environmentally. The score is determined when information on the site is at its early and worst stage; the score is never changed on the basis of new and improved information, such as the eventual risk assessment, nor is it changed to reflect the environmental consequences of emergency, removal, or remedial cleanup actions at the site." *Id.*

206. One recent estimate is that EPA has approximately 3530 person-years working on Superfund matters, and that the 50 states collectively have invested roughly 3650 person-years in remediating hazardous waste sites. ANNUAL REVIEW OF THE U.S. ENVTL. PROTECTION AGENCY, PROGRAM EVALUATION BUDGET ANALYSIS FUNDING RECOMMENDATIONS, ENVIRONMENTAL BUDGET PRIORITIES PROJECT CENTER FOR RESOURCE ECONOMICS 87 (May 1993); 50-STATE STUDY, 1991 UPDATE, *supra* note 5, at 5.

207. Several interviewees offered their view that the NPL does not represent a prioritization of sites. Some interviewees fear that the NPL does not necessarily contain the worst sites, nor does it prioritize adequately the sites on the List.

New York State's Department of Environmental Conservation has recently refined its system for ranking sites. The system considers environmental, natural resources, and public health concerns in assigning cleanup priority. DEPARTMENT OF ENVTL. CONSERVATION, NEW YORK STATE, HWR-92-4047, DIVISION OF TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM: PRIORITY RANKING SYSTEM FOR CLASS 2 INACTIVE HAZARDOUS WASTE SITES (Apr. 1, 1993). Such a system would be a good starting point for a federal effort to prioritize sites.

people working on Superfund matters, would be shifted to the states.[208] The states would have primary responsibility for the nation's effort to investigate and cleanup the comprehensive list of sites, with some level of oversight from EPA.

IV. CONCLUSION

The discussion concerning the appropriate roles for the federal and state governments in the battle to clean up the nation's toxic waste sites is a chapter in the debate concerning how best to manage our federal system; a debate that has been ongoing since our government was created more than two hundred years ago.

CERCLA reauthorization provides a forum for refining or radically restructuring the current framework for the federal/state relationship in the Superfund arena. This Article concludes that the federal government, at a minimum, should refine the existing framework by taking several specific actions to strengthen the federal/state relationship. Within the current framework, the federal government should make several changes to improve the handling of NPL sites.

First, the federal government should maximize the contribution of "capable" states in addressing Superfund sites, by allowing, and in fact encouraging, states that are capable of and interested in handling entire sites to do so. Second, the federal government should improve the collective efficiency of the state and federal governments by eliminating financial incentives for conflict between the two levels of government. Third, the federal government should act to further improve the collective efficiency of the state and federal governments by significantly streamlining the Superfund process. EPA should not be obligated to be "substantially involved" at sites where states take the lead, and states should be rewarded financially and otherwise under the federal program for successfully handling sites on their own. The federal government also should streamline its internal procedures for handling sites. Finally, the federal government should "go back to first principles" in terms of communicating with the EPA regions and with the states. The federal government needs to revisit both the message itself as well as the

208. *See supra* note 206 (regarding the number of federal Superfund employees). The interviewees recognized that many federal employees might not transfer over to state employment. Instead, the level of resources that the federal government had invested in its Superfund effort would transfer.

medium it uses to communicate this message. In addition, within the existing framework, the federal government has the opportunity to change Superfund to improve the completion of timely and effective cleanups at non-NPL sites.

The federal government has the option to fundamentally alter the framework for federal/state relations in the Superfund arena. The Delegation Model, discussed in Section III, undoubtedly will receive considerable attention and support during the upcoming reauthorization debate, given its use in other programs and its intuitive appeal. This appeal is due to its clear division of functions and its ability to allow the federal government to focus on matters that truly are of national and international importance and that only it can handle. Based on the findings of this Article, Congress should be aware of two significant issues associated with adopting such a model: (1) The impressive strides the federal government appears to have made in recent years in developing an infrastructure that has completed a large number of site cleanups and achieved a significant number of PRP-funded studies and cleanups, means that dismantling such an infrastructure clearly carries risks, especially during the "transition" period; and (2) the uncertainty concerning state "capability" to take over the Superfund program raises questions as to whether a delegation model would create unrealistic expectations that would lead to frustration and conflict. Congress' careful consideration of both the "partial fixes" to the federal/state relationship described above, as well as to the pros and cons of a more radical shift of responsibilities, will contribute to producing a more efficient and more effective federal/state partnership in the effort to clean up the nation's thousands of toxic waste sites.