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NOTE

FEDERAL AND STATE REMEDIES TO CLEAN UP HAZARDOUS WASTE SITES

Over fifty-seven million metric tons of hazardous waste are produced as a by-product of manufacturing in the United States each year. Only ten percent of this waste is disposed of in an environmentally sound manner.¹ The improper disposal of hazardous waste has given rise to crisis areas of national notoriety such as "Love Canal"² and "Valley of the Drums."³ Although the danger to public health and the environment cannot be precisely calculated,⁴ the disposal of hazardous waste presents a problem that can no longer be ignored. Virginia's own experience with kepone contamination in the James River⁵ exemplifies the dangers and costs associ-

1. This is an average of 600 lbs. of hazardous waste per American. The rate is increasing 3.5 percent annually. S. REP. NO. 848, 96th Cong., 2d Sess. 3 (1980).

2. During the 1940's, Hooker Chemical Company began dumping hazardous waste into an abandoned canal near Niagara Falls, New York. In 1953, the canal was filled in and sold to the city (purchase price one dollar) to build low-cost housing and an elementary school. By the spring of 1978, parts of the canal had collapsed due to the deterioration of the drums holding hazardous materials. The effects of escaping chemicals were seen in the community as school children reported unexplained rashes and houses deteriorated from chemicals seeping into their basements. The New York State Health Department also found in the community astounding health problems which included epilepsy, miscarriages, liver abnormalities, birth defects, headaches, and rectal bleeding. The area had to be evacuated and the school closed. *Id.* at 8-10. Love Canal resulted in over \$2 billion worth of lawsuits and cleanup costs, whereas \$4 million (in 1979 dollars) spent in 1952, when the site was closed, would have prevented the disaster. H.R. REP. NO. 1016, 96th Cong., 2d Sess. 20, reprinted in 1980 U.S. CODE CONG. & AD. NEWS 6119, 6123.

3. Several 55 gallon drums were discovered floating in a flooded creek near Louisville, Kentucky, in 1978. As a result of a search by environmental officials, 20,000 drums containing toxic waste were found deteriorating in the Kentucky hills. 126 CONG. REC. 30,931 (1980) (statement of Sen. Randolph).

4. In June 1980, a report of the Department of Health and Human Services stated that "the scope of the health problem that could derive from chemical waste dumps cannot be precisely estimated at present. The problem could be enormous." S. REP. NO. 848, *supra* note 1, at 5. The danger to the environment includes contamination of groundwater and surface water, destruction of fish and wildlife, and threats of fires and explosions. *Id.* at 4.

5. Kepone is a highly toxic chemical which was produced by Allied Chemical Corporation in Hopewell, Virginia, from 1966 to 1974. During this time, hundreds of thousands of pounds of the chemical were dumped into the local wastewater treatment plant which was not equipped to treat toxic waste. As a result, the James River became polluted with large quantities of this toxic chemical causing the river to be closed to fishing for many years. See McThenia & Ulrich, *A Return to Principles of Corrective Justice in Deciding Economic*

ated with this disposal problem.

With an estimated \$100 billion needed to clean up all of the hazardous waste sites in the country,⁶ certain programs have been developed by Congress and individual state legislatures in an effort to abate the problems resulting from the improper disposal of hazardous waste. Part I of this note will examine the various remedies which are available to the states under two federal statutes—the Comprehensive Environmental Response, Compensation, and Liability Act⁷ (CERCLA) and the Resource Conservation and Recovery Act⁸ (RCRA). Remedies under CERCLA include joint federal-state actions, independent state actions, and mandatory injunctions. This note will consider CERCLA's strict liability provision in light of some differing interpretations and applications of the statute by federal courts. RCRA remedies, particularly those created by the Hazardous and Solid Waste Amendments of 1984⁹ which enable states to enjoin responsible parties to clean up hazardous waste sites, will then be discussed. This note will conclude that, although the federal scheme represents a great step toward alleviating the problems associated with hazardous waste disposal, many gaps remain which will necessitate state action.

In light of these facts, Part II will examine the efforts of different states to supplement these two basic federal remedies. Particular attention is focused on the liability provisions of state legislative and enforcement mechanisms. Part III will examine current efforts under Virginia law to remedy hazardous waste problems and will expose the need for more extensive legislation in the area. By analyzing the successes and failures of these federal and state programs, perhaps the commonwealth can develop a comprehensive scheme to rid itself once and for all of the serious dangers posed by the improper disposal of hazardous waste.

I. REMEDIES FOR CLEANING UP HAZARDOUS WASTE SITES UNDER FEDERAL LAW

A. *The Comprehensive Environmental Response, Compensation, and*

Loss Cases, 69 VA. L. REV. 1517, 1518 n.5 (1983).

6. 131 CONG. REC. S11,589 (daily ed. Sept. 17, 1985) (statement of Sen. Gore).

7. 42 U.S.C. §§ 9601-57 (1982).

8. *Id.* §§ 6901-87, amended by Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, tit. I, 98 Stat. 3224 (1984). As originally enacted in 1965, the statutory system governing solid waste was known as the "Solid Waste Disposal Act." Pub. L. No. 89-272, tit. II, 79 Stat. 997 (1965). The statute was amended in its entirety and completely revised in 1976 to govern the management of solid and hazardous waste. Pub. L. No. 94-580, § 2, 90 Stat. 2795 (1976).

9. Pub. L. No. 98-616, tit. I, 98 Stat. 3224 (1984).

Liability Act

1. Structure of the Act

Congress responded to the growing problem of abandoned and inactive hazardous waste sites in 1980 by enacting CERCLA.¹⁰ One of the most important aspects of CERCLA is the creation of a \$1.6 billion fund popularly known as the "Superfund."¹¹ Monies from the Superfund are spent to finance hazardous substance¹² cleanups, to compensate for the loss of natural resources, and to reimburse any reasonable costs of assessing injury to natural resources.¹³ CERCLA refers to cleanups as "response" ac-

10. 42 U.S.C. §§ 9601-57 (1982). CERCLA was passed in order to remedy the defects found to exist in the Resource Conservation and Recovery Act of 1976 (RCRA). 42 U.S.C. §§ 6901-87 (1982), amended by 42 U.S.C.A. §§ 6901-91 (Cum. Supp. 1985). See also *infra* notes 87-90 and accompanying text. Four specific areas in which RCRA was found to be deficient were: (1) abandoned waste sites were not regulated, (2) neither the EPA nor the Department of Justice had the power to subpoena, (3) inactive disposal sites were not considered, and (4) inadequate funds were allocated for state cleanup programs. OVERSIGHT AND INVESTIGATIONS SUBCOMM. OF THE HOUSE COMM. ON INTERSTATE AND FOREIGN COMMERCE, 96TH CONG., 1ST SESS., HAZARDOUS WASTE DISPOSAL 47-51 (Comm. Print 1979). CERCLA was rushed through Congress at the end of the 1980 session during the lame-duck presidency of Jimmy Carter. Because of the hurried nature in which CERCLA was passed, the legislative history is limited. See *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1040 (2d Cir. 1985); see also Grad, *A Legislative History of the Comprehensive Environmental Response, Compensation, and Liability ("Superfund") Act of 1980*, 8 COLUM. J. ENVTL. L. 1 (1982) (detailed analysis of the evolution of CERCLA).

11. See 42 U.S.C. § 9631(b)(2) (1982). The original Senate bill provided for a fund of \$4.1 billion. See S. REP. No. 848, *supra* note 1, at 69 (accompanying S. 1480, 96th Cong., 1st Sess. (1979)).

12. CERCLA defines hazardous substance as follows:

(A) any substance designated pursuant to section 1321(b)(1)(A) of title 33, (B) any element, compounds, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C. §§ 6901-6987] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

42 U.S.C. § 9601(14) (1982). This definition includes hazardous waste as defined by RCRA. See *id.* § 6903(5).

13. See *id.* § 9611. Eighty-seven and one-half percent of the funding comes from a tax on crude oil and other petroleum related products, while the other 12.5 percent is from general revenue. Eckhardt, *The Unfinished Business of Hazardous Waste Control*, 33 BAYLOR L. REV. 253, 261 (1981).

tivities,¹⁴ which are divided further into "removal"¹⁵ and "remedial actions."¹⁶ Removal actions are short-term responses which provide a temporary answer to the problem caused by the hazardous waste. For example, in a situation where the groundwater in a residential area is contaminated, a possible removal action would be to supply the threatened individuals with an alternative water supply. A remedial action is meant to serve as a permanent cure for the problem. A remedial response to the contaminated groundwater might be effectuated by either purifying the

14. See 42 U.S.C. § 9601 (23), (24), (25) (1982).

15. CERCLA defines "remove" or "removal" as:

[T]he cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat or release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 9604(b) of this title, and any emergency assistance which may be provided under the Disaster Relief Act of 1974 [42 U.S.C. §§ 5121-5202].

Id. § 9601(23)(1982).

16. CERCLA defines "remedy" or "remedial action" as:

[T]hose actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances or contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incinerations, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities where the President determines that, alone or in combination with other measures, such relocation is more cost-effective than and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition offsite of hazardous substances, or may otherwise be necessary to protect the public health or welfare. The term does not include offsite transport of hazardous substances, or the storage, treatment, destruction, or secure disposition offsite of such hazardous substances or contaminated materials unless the President determines that such actions (A) are more cost-effective than other remedial actions, (B) will create new capacity to manage, in compliance with subtitle C of the Solid Waste Disposal Act [42 U.S.C. §§ 6921-6934], hazardous substances in addition to those located at the affected facility, or (C) are necessary to protect public health or welfare or the environment from a present or potential risk which may be created by further exposure to the continued presence of such substances or materials.

Id. § 9601(24).

water and removing the source of contamination or by converting the temporary alternative water source which was set up by the removal action into a permanent solution. Both removal and remedial actions may be undertaken any time there is a release or threatened release of a hazardous substance into the environment.¹⁷

CERCLA imposes liability on past and present owners and operators of hazardous waste facilities and on any other person involved in the disposal, treatment, or transportation process.¹⁸ These classes of persons will be liable for:

(A) all costs of removal or remedial action incurred by the United States Government or a State 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; and

(C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing injury, destruction or loss resulting from such a release.¹⁹

The only defenses to individual liability for cleanup costs are an act of God, an act of war, or an act or omission of a third party.²⁰ If a party determined to be responsible for a hazardous waste site cannot prove one of the three defenses, then the party will be held *strictly liable* for all costs specified under the Act.²¹ This liability is meant to apply retroac-

17. See *supra* notes 15-16; see also *id.* § 9607(a)(4) (1982).

18. CERCLA assigns liability to four classes of persons:

(1) the owner and operator of a vessel (otherwise subject to the jurisdiction of the United States) or a facility,

(2) any person who at the time of the disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility owned or operated by another party or entity and containing such hazardous substances, and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance

Id. § 9607(a) (1982).

19. *Id.* § 9607(a)(4). Note that the definition of the word "person" in CERCLA includes a state. *Id.* § 9601(21). This is important for both liability and cost recovery concerns.

20. *Id.* § 9607(b).

21. *City of Philadelphia v. Stepan Chem. Co.*, 544 F. Supp. 1135, 1140 n.4 (E.D. Pa. 1982); see also *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1042, 1044 (2d Cir. 1985). The court in *Shore* held that the standard of liability under CERCLA is the same as that under the Clean Water Act, 33 U.S.C. § 132 (1982), which has been interpreted by the courts to be strict liability. *Shore*, 759 F.2d at 1042; see *Steuart Transp. Co. v. Allied Towing Corp.*, 596 F.2d 609, 613 (4th Cir. 1979). Sponsors of the compromised version of CERCLA as passed

tively, as the purpose of CERCLA is to clean up hazardous waste sites, irrespective of when the hazardous waste activities first occurred.²²

In order to effectuate CERCLA, the Administrator of the Environmental Protection Agency (EPA) was required to promulgate a National Contingency Plan (NCP) as a guideline for response activities.²³ As a part of the NCP, the Administrator was responsible for assembling a National Priorities List (NPL) of the highest priority sites to be cleaned up. At least one site from each state was to be included among the top one hundred sites.²⁴ Presently, the NPL contains 541 sites across the country and throughout the territories.²⁵

2. Joint Federal-State Action Under CERCLA

The NCP plays a mandatory role in federal responses²⁶ and joint federal-state actions.²⁷ To carry out a joint remedial action, the state must

also stated that strict liability was to apply in § 107. S. REP. No. 848, *supra* note 1, at 34.

22. *United States v. Shell Oil Co.*, 605 F. Supp. 1064, 1072 (D. Colo. 1985). The *Shell* case had a very unique set of facts. The United States Army had owned the Rocky Mountain Arsenal located 10 miles northeast of downtown Denver, Colorado, since 1942. Chemical agents and amunitions were manufactured, tested, and disposed of on the property. In 1947, the United States leased a portion of the arsenal to the Shell Oil Company (Shell) "for the manufacture, packaging and other handling of pesticides, herbicides, and other chemicals." *Id.* at 1067. The State of Colorado ordered the United States and Shell to cease and desist all discharging of the chemicals, to clean up all sources of contamination, and to monitor the groundwater. The United States brought an action against Shell to recover all or part of the \$47,800,000 of response costs incurred in responding to releases of chemicals for which Shell was responsible. *Id.* at 1067-68. Shell argued that CERCLA was not meant to apply retroactively. *Id.* at 1068. The court disagreed with Shell and found that CERCLA was enacted to address the "ongoing environmental deterioration resulting from wastes which had been dumped in the past It is by its very nature backward looking." *Id.* at 1072.

23. 42 U.S.C. § 9605 (1982). The NCP can be found in 40 C.F.R. §§ 300-300.86 (1985). *See also* 50 Fed. Reg. 6320 & 37,623-33 (1985) (to be codified at 40 C.F.R. § 300 app. A). Responsibilities of the President under this section have been delegated to the Administrator of the EPA. Exec. Order No. 12,316, 3 C.F.R. 168 (1981), *reprinted in* 42 U.S.C. § 9615 app. at 1444-45 (1982).

24. 42 U.S.C. § 9605(8)(B) (1982). Each state must designate a facility which is "the greatest danger to public health or welfare or the environment." *Id.*

25. *See* 48 Fed. Reg. 40,658 (1983); 49 Fed. Reg. 37,070 (1984); 50 Fed. Reg. 6320 & 37,630 (1985) (to be codified at 40 C.F.R. § 300 app. A). The factors which are taken into account by the EPA in compiling the NPL are: the population at risk; the hazardous potential of the chemicals contained by the facility; the potential for direct contact by individuals; the destruction of eco-systems; the contamination of drinking water; and other relevant factors. 40 C.F.R. § 300, app. A § 1 (1985).

26. "[T]he President is authorized to act, consistent with the national contingency plan, to remove or arrange for the removal of, and provide for remedial action relating to such hazardous substance . . ." 42 U.S.C. § 9604(a)(1)(B) (1982); *see also supra* note 23.

27. The EPA must comply with the NCP when taking response action. *J.V. Peters & Co. v. Ruckelshaus*, 584 F. Supp. 1005, 1009 (N.D. Ohio 1984). Therefore, any joint federal-state action pursuant to § 9604(c) must also conform to § 9604(a). *See* 42 U.S.C. § 9604 (1982).

enter into a contract or cooperative agreement with the EPA.²⁸ In this agreement, the state must assure: (1) the future maintenance of all response actions; (2) the availability of a disposal facility acceptable to the EPA and in compliance with the RCRA;²⁹ and (3) payment of ten percent of the cost of remedial action (including all future maintenance costs) at a facility not owned by the state or at least fifty percent of the cost if the facility is state-owned.³⁰ CERCLA does provide that up to one million dollars can be spent on an action before a state must enter into a contract.³¹ The importance of such an arrangement is that the cost of response actions may then be recovered from the Superfund.³²

3. Independent State Action Under CERCLA

States may also take action independent from the federal government by cleaning up a waste site on their own and then suing the culpable parties under the liability provision of CERCLA, section 107.³³ CERCLA allows a state to recover response costs "not inconsistent with" the NCP.³⁴ This language has given rise to litigation over the degree of consistency required in a state's response actions, including whether the site must be placed on the NPL for the state to bring suit against the responsible parties.³⁵

Two similar interpretations have emerged in the courts concerning this

28. 42 U.S.C. § 9604(c)(3) (1982).

29. *Id.* Compliance with the RCRA, 42 U.S.C.A. §§ 6901-87 (West Cum. Supp. 1985), is only a factor when storage, destruction or treatment of any hazardous wastes is necessary at any place other than on the site where the response action is being taken. 42 U.S.C. § 9604(c)(3)(A) (1982).

30. *Id.* § 9604(c)(3). Congress originally planned to amend this section decreasing the state's share to 10% of cleanup costs at state owned facilities. See H.R. REP. NO. 198, 98th Cong., 2d Sess. 21, reprinted in 1984 U.S. CODE CONG. & AD. NEWS 5576, 5580. This amendment, however, was rejected in the Joint Explanatory Statement of the Committee of Conference. *Id.* at 131, reprinted in 1984 U.S. CODE CONG. & AD. NEWS at 5702.

31. See 42 U.S.C. § 9604(c)(1) (1982). The state is further required to authorize the reduction of state credits to cover the costs of the cleanup. 40 C.F.R. § 300.62(d)(1) (1985). These credits are awarded to the state for any out-of-pocket, non-federal, response costs which the state incurred between January 1, 1978, and December 11, 1980. 42 U.S.C. § 9604(c)(3) (1982). These credits "must be documented on a site-specific basis." 40 C.F.R. § 300.62(e) (1985). A state will not be reimbursed from the fund for any money spent above the state's matching share. 42 U.S.C. § 9604(c)(3) (1982). If no credits are available, a state may either identify "currently available funds earmarked for remedial implementation" or submit "a plan with milestones for obtaining necessary funds, to cover the percentage for which the state is responsible." 40 C.F.R. § 300.62(d)(2), (3) (1985).

32. 42 U.S.C. § 9611(a)(1) (1982).

33. *Id.* § 9607. See *supra* notes 18-22 and accompanying text.

34. *Id.* § 9607(a)(4)(A). See *supra* notes 23-24 and accompanying text.

35. See, e.g., *New York v. Shore Realty Corp.*, 759 F.2d 1032 (2d Cir. 1985); *United States v. Wade*, 577 F. Supp. 1326 (E.D. Pa. 1983); *United States v. Reilly Tar & Chem. Corp.*, 546 F. Supp. 1100 (D. Minn. 1982).

issue. The first is best illustrated by the opinion in *United States v. Reilly Tar & Chemical Corp.*³⁶ The defendant, Reilly Tar & Chemical Corporation (Reilly Tar), had generated toxic chemical waste for fifty-five years prior to ceasing operations in 1972. Disposal of the waste was carried out on the plant's own site but chemicals began leaching into the groundwater causing numerous drinking water wells to be contaminated and closed. A suit was brought by the United States, the State of Minnesota, and the City of St. Louis Park to prevent the drinking water of the Minneapolis-St. Paul metropolitan area from being contaminated.³⁷

Reilly Tar argued that response costs could be recovered under the liability provision of CERCLA³⁸ *only if* the action was taken pursuant to section 104,³⁹ which authorizes actions consistent with the NCP, and section 111,⁴⁰ which authorizes expenditures from the fund.⁴¹ The United States District Court for Minnesota rejected this argument and found that the sections are independent of each other.⁴² The court strictly construed the first clause of the liability provision which states: "Notwithstanding any other provision or rule of law and subject only to the defenses set forth in section (b) of this section"⁴³ Since the word "notwithstanding" was used, and the only defenses allowed were clearly specified, the liability provision was found to be self-sufficient and intended by Congress to stand alone.⁴⁴ The court held that unless a claim is made by the plaintiff seeking recovery directly under the fund, consistency with the NCP would not be required in imposing liability on a responsible party.⁴⁵

The *Reilly Tar* rationale was taken a step further in *United States v. Wade*.⁴⁶ The *Wade* court found that the \$1.6 billion provided for cleanups under CERCLA had been recognized repeatedly as inadequate to

36. 546 F. Supp. 1100 (D. Minn. 1982). Although *Reilly Tar* involved the United States as a party, the State of Minnesota also brought suit.

37. *Id.* at 1105-06.

38. 42 U.S.C. § 9607 (1982).

39. *Id.* § 9604.

40. *Id.* § 9611.

41. *Reilly Tar*, 546 F. Supp. at 1117-18.

42. *Id.* at 1118.

43. 42 U.S.C. § 9607(a) (1982).

44. *Reilly Tar*, 546 F. Supp. at 1118.

45. *Id.* at 1117-18. Essentially, the court refused to read the NCP provision and the uses of the fund provision into the liability provision of CERCLA.

46. 577 F. Supp. 1326 (E.D. Pa. 1983). The case came before the court on a motion for summary judgment after the court had ruled previously on a motion to dismiss in *United State v. Wade*, 546 F. Supp. 785 (E.D. Pa. 1982). The court's ruling in the first *Wade* decision, that RCRA did not apply to abandoned or inactive waste sites, was found by Congress to be inconsistent with the intent behind the act. See *infra* notes 88-93 and accompanying text.

meet the demands for correcting the hazardous waste problem.⁴⁷ The court stated that the Superfund was restricted in order to limit cleanups to only a few sites where the responsible parties could not be located. Congress included the liability section to allow recovery from responsible parties and to protect the small amount allocated under the fund.⁴⁸ Therefore, expenditures made by a state responding to a hazardous waste site, outside the scope of NCP consistency section 104,⁴⁹ only affect recovery from the fund but not the right to sue the responsible parties to recover those expenses.⁵⁰

A second interpretation was provided by the Court of Appeals for the Second Circuit in *New York v. Shore Realty Corp.*⁵¹ The factual situation presented in *Shore* involved a site containing 700,000 gallons of hazardous chemicals in leaky tanks.⁵² The State of New York brought suit to recover response costs, including the costs of assessing the condition of the site and supervising removal of the drums. The state also sought to enjoin the defendants to clean up the facility.⁵³

New York, on the strength of the *Reilly Tar* and *Wade* interpretations,⁵⁴ argued that the liability provision⁵⁵ was meant to stand separate from the NCP consistency⁵⁶ and funding sections.⁵⁷ The court, however, did not wholly accept the argument for two reasons.⁵⁸ First, the court reasoned that Congress intended the liability section to be carried out under the guidelines of the NCP for federally funded cleanups, specifically pursuant to the NCP consistency section. Furthermore, since these cleanups would involve Superfund money, Congress meant for the liability provision to go hand-in-hand with the funding section, as well as the NCP consistency section.⁵⁹ Secondly, the court found it difficult to accept

47. *Wade*, 577 F. Supp. at 1327.

48. *Id.*

49. 42 U.S.C. § 9604 (1982).

50. *See Wade*, 577 F. Supp. at 1336. Other cases taking the *Reilly Tar* and *Wade* position are: *New York v. General Elec. Co.*, 592 F. Supp. 291 (N.D.N.Y. 1984) (involving the sale of used transformer oil containing hazardous substances to a dragstrip for dust control); *United States v. Northeastern Pharmaceutical & Chem. Co.*, 579 F. Supp. 823 (W.D. Mo. 1984) (involving the cleanup of approximately five hundred deteriorating drums of toxic waste buried on a farm); *State ex rel. Brown v. Georgeoff*, 562 F. Supp. 1300 (N.D. Ohio 1983) (involving a waste site threatening to contaminate the source of drinking water for the cities of Niles and Youngstown).

51. 759 F.2d 1032 (2d Cir. 1985).

52. *Id.* at 1037-39.

53. *Id.* at 1032. For a discussion of the availability of injunctive relief under CERCLA, see *infra* notes 77-82 and accompanying text.

54. *See supra* notes 36-50 and accompanying text.

55. 42 U.S.C. § 9607 (1982).

56. *Id.* § 9604.

57. *Id.* § 9611.

58. *Shore*, 759 F.2d at 1046.

59. *Id.*

the words "notwithstanding any other provision" as demanding that the liability section stand alone.⁶⁰

Shore Realty Corporation (Shore) took the position, as had the defendant in *Reilly Tar*,⁶¹ that the state must respond consistently with the NCP. More specifically, Shore contended that the site must be on the NPL, one of the provisions of the NCP, in order for the state to recover any response costs⁶²—either removal or remedial.⁶³ The court, however, rejected this argument and instead held that inclusion on the NPL is only a limitation on federally funded, long-term remedial actions, and not on more short-term removal actions.⁶⁴ The wording of section 105,⁶⁵ which authorizes the NCP, requires the EPA to establish a NPL for "priorities for remedial action."⁶⁶ Furthermore, the NCP consistency section⁶⁷ limits joint federal-state responses of remedial activity to situations where a contract or cooperative agreement has been made.⁶⁸ The section goes on to provide that these "joint efforts must be taken 'in accordance with criteria and priorities established pursuant to section 9605(8)'—the NPL provision."⁶⁹

Rationalizing its position further, the court found that CERCLA's legislative history also supported this interpretation that only federally funded remedial actions are limited to sites on the NPL.⁷⁰ The court pointed out that the NPL was not a part of the NCP in any of the previous House or Senate versions of the Act, although joint federal-state responses were limited to the NPL in the Senate bill.⁷¹ The very purpose of CERCLA is to clean up the huge number of hazardous waste sites. With such a small number of these sites on the list, Congress certainly meant for only the federally funded remedial actions to be limited.⁷²

In summary, the *Reilly Tar* and *Shore* courts came to basically the

60. *Id.* "Shore's argument is not based on implying limitations on the scope of section 9604 [the NCP consistency section] into section 9607 [the liability provision] but on an interpretation of 'not inconsistent with' the NCP under section 9607 itself." *Id.*

61. *See supra* text accompanying notes 38-41.

62. *Shore*, 759 F.2d at 1046.

63. For the distinction between "removal" and "remedial actions," see *supra* notes 14-17 and accompanying text.

64. *Shore*, 759 F.2d at 1046.

65. 42 U.S.C. § 9605 (1982).

66. *Id.* § 9605 (8)(B) (emphasis added).

67. *Id.* § 9604.

68. *Shore*, 759 F.2d at 1046-47 (emphasis added).

69. *Id.* at 1047 (quoting 42 U.S.C. § 9604(d)(1) (1982)).

70. *Id.* Following *United States v. Mehrmanesh*, 689 F.2d 822, 829 (9th Cir. 1982), and *National Insulation Transp. Comm. v. ICC*, 683 F.2d 533, 537 (D.C. Cir. 1982), the court held that a statute would not be construed so as to make any of the provisions surplusage unless Congress commanded otherwise. *Shore*, 759 F.2d at 1044.

71. *Id.* at 1047.

72. *Id.*

same conclusion, but by different reasoning. The *Reilly Tar* court found the liability provision to stand alone, and therefore state response actions need not be consistent with the NCP, of which the NPL is a part.⁷³ The court in *Shore* found that the liability provision is subject to the provision of the NCP but only to the extent that federally funded remedial actions involve a site on the NPL.⁷⁴

Many district courts have interpreted CERCLA as consistent with *Reilly Tar*,⁷⁵ but it is interesting to note that all of the cases preceded *Shore*.⁷⁶ In any regard, it does appear that a responsible party may be held liable for response costs expended by a state responding to a release or threatened release of a hazardous waste. The downside of this is that the state has to expend its limited resources in responding to the incident and then sue the responsible party to recover the costs. Such an approach can be frustrating at best as many states have only limited financial resources with which to respond and litigation can delay for years any repayment to the state treasury.

4. Injunctive Relief Under CERCLA

An alternative to this respond-and-sue process is for the state to seek injunctive relief against the responsible parties, forcing them to clean up the hazardous waste site on their own. In *Shore*, the State of New York attempted to obtain injunctive relief pursuant to section 106 of CERCLA.⁷⁷ New York reasoned that disallowing injunctive relief would greatly diminish the effect of the liability section of CERCLA⁷⁸ and congressional intent to correct the hazardous waste problem.⁷⁹

In reading the injunction provision literally, the court ruled that CER-

73. See *supra* notes 42-45 and accompanying text.

74. See *supra* notes 64-72 and accompanying text.

75. See *supra* note 50.

76. *Shore* was decided in 1985 while the other decisions referred to were decided in 1983 and 1984. See *supra* note 50.

77. *Shore*, 759 F.2d at 1049. CERCLA states:

In addition to any other action taken by a State or local government, when the President determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from a facility, he may require the Attorney General of the United States to secure such relief as may be necessary to abate such danger or threat, and the district court of the United States in the district in which the threat occurs shall have jurisdiction to grant such relief as the public interest and the equities of the case may require. The President may also, after notice to the affected State, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect health and welfare and the environment.

42 U.S.C. § 9606(a) (1982).

78. *Id.* § 9607.

79. *Shore*, 759 F.2d at 1049.

CLA only permits the EPA to sue for an injunction.⁸⁰ To allow the state to obtain an injunction under CERCLA would conflict with the liability provision, which does not require an "imminent and substantial endangerment to public health or welfare or the environment."⁸¹ Congress also rejected authorization of injunctive relief to the states by amending the original Senate version of the injunction provision, which had included the states.⁸² Under the reasoning of *Shore*, therefore, states may only respond and sue the responsible party under the provisions of CERCLA.

B. *Resource Conservation and Recovery Act*

Congress enacted the RCRA⁸³ to provide "cradle-to-grave" management of all aspects of the generation, transportation, treatment, storage, and disposal of hazardous waste in an effort to prevent future waste sites.⁸⁴ Although CERCLA is the primary federal mechanism for hazardous waste cleanups, RCRA, unlike CERCLA, may provide a state with more of an alternative in seeking injunctive relief.

1. Structure of the Act

The primary means of implementing RCRA is through the use of a manifest tracking system which monitors hazardous waste from its generation and transportation to its ultimate treatment, storage, or disposal.⁸⁵ Further, facilities which treat, store, or dispose of hazardous waste are required to obtain a permit in order to carry out any of their operations.⁸⁶ A permit may be revoked any time the EPA determines that an owner or operator failed to comply with the permit provisions. The requirements include maintaining records of all hazardous waste, inspecting and monitoring the facility, and supplying the EPA with estimates of quantities of hazardous waste at the facility.⁸⁷

80. *Id.*

81. *Id.* Once again, the court refused to interpret a section of the statute in such a way as to make a part of it surplusage. See *supra* note 70 and accompanying text.

82. *Shore*, 759 F.2d at 1049. The Senate bill was S. 1480, 96th Cong., 2d Sess. (1979).

83. 42 U.S.C. §§ 6901-87 (1982), amended by Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, tit. I, 98 Stat. 3224 (1984).

84. See 42 U.S.C.A. § 6902 (West 1985); see also Deutsch, Torlock & Robbins, *An Analysis of Regulations Under the Resource Conservation and Recovery Act*, 25 WASH. U.J. URB. & CONTEMP. L. 145, 147 (1983).

85. 42 U.S.C.A. §§ 6923, 6924, 6925 (West 1983 & Supp. 1985).

86. *Id.* § 6925.

87. *Id.* States are authorized to operate a hazardous waste management program in lieu of EPA by meeting the provisions contained in § 6926.

2. Injunctive Relief Under RCRA

The pertinent provisions of RCRA, as amended in 1984, which apply to cleaning up abandoned and inactive waste sites are the citizen suit provision, section 401,⁸⁸ and the imminent hazard provision, section 402.⁸⁹ Prior to the 1984 amendments, the courts in *United States v. Waste Industries, Inc.*,⁹⁰ *United States v. Wade*,⁹¹ and *United States v. North-eastern Pharmaceutical & Chemical Co.*⁹² all held that RCRA does not apply to abandoned or inactive hazardous waste sites. The legislative history to the 1984 amendments, however, clearly states that these cases "are inconsistent with the authority conferred by the section as initially enacted and within these clarifying amendments."⁹³

With this barrier removed, the question arose as to how a state can force a cleanup when the injunction section provides only for an EPA initiated suit.⁹⁴ The Court of Appeals for the Fourth Circuit addressed the issue, prior to the 1984 amendments, in *Environmental Defense Fund, Inc. v. Lamphier*.⁹⁵ In *Lamphier*, the defendant owned a farm on which he disposed of hazardous waste. After samples of well water collected by the state health department were analyzed and found to contain toxic substances,⁹⁶ the defendant proceeded to dispose of the waste remaining on the surface by incineration. The Environmental Defense Fund (EDF) and the Chesapeake Bay Foundation (CBF) filed a complaint under the "citizen suit" provision of RCRA.⁹⁷ Subsequently, the Commonwealth of Virginia intervened seeking injunctive relief as well as re-

88. *Id.* § 6972.

89. *Id.* § 6973.

90. 556 F. Supp. 1301 (E.D.N.C. 1982), *rev'd*, 734 F.2d 159 (4th Cir. 1984). In *Waste Industries*, the United States sought an injunction to remedy the contamination of groundwater. The trial court held that the RCRA "imminent hazard" provision, 42 U.S.C. § 6973 (1982), did not apply to past activities. The appellate court reversed, finding that § 6973 does not regulate conduct, but rather mitigates and regulates endangerments. The section could not be read "as restraining only active human conduct." *United States v. Waste Industries, Inc.*, 734 F.2d 159, 163-64 (4th Cir. 1984).

91. 546 F. Supp. 785 (E.D. Pa. 1982) (motion to dismiss).

92. 579 F. Supp. 823 (W.D. Mo. 1984).

93. H.R. REP. No. 198, pt. III, 98th Cong., 2d Sess. 118, *reprinted in* 1984 U.S. CODE CONG. & AD. NEWS 5636, 5690.

94. The section states:

Notwithstanding any other provision of this chapter, upon receipt of evidence that the past or present handling storage, treatment, transportation or disposal of any solid or hazardous waste may present an imminent and substantial endangerment to health or the environment, the *Administrator* may bring suit on behalf of the United States in the appropriate district court

42 U.S.C.A. § 6973 (West Supp. 1985) (emphasis added).

95. 714 F.2d 331 (4th Cir. 1983).

96. *Id.* at 333, 334.

97. 42 U.S.C. § 6972 (1982), *amended by* 42 U.S.C.A. § 6973 (West Supp. 1985).

spense costs pursuant to CERCLA.⁹⁸

The *Lamphier* court held that the citizen suit provision allowed the district court to enforce RCRA "presumably to the full extent of its legal and equitable powers."⁹⁹ Since the EDF and CBF were not pursuing a private remedy, they were considered to be acting as "private attorneys general" and, therefore, allowed to seek injunctive relief.¹⁰⁰ The court reasoned that when the public health is endangered, an injunction is the appropriate relief to abate the problem. Unlike actions brought by private parties in an individual capacity, there is no need to conduct a balancing of equities involving the questions of risk of irreparable injury and inadequate legal remedies. The emphasis shifts away from irreparable injury and focuses instead on the interests of the general public.¹⁰¹

By ruling that an injunction is a proper remedy, *Lamphier* opens the door for states to utilize injunctive relief, at least in the Fourth Circuit. Under the citizen suit provision, any "person" may bring a citizen suit.¹⁰² Since the word "person" as defined by RCRA includes a "state,"¹⁰³ arguably RCRA, unlike CERCLA, allows a state to enjoin liable parties to clean up hazardous waste sites.¹⁰⁴

The burden of proof which must be met is to show that the "disposal of . . . hazardous waste . . . may present an imminent and substantial endangerment to health or the environment."¹⁰⁵ In reviewing the district court's decision in *United States v. Waste Industries, Inc.*,¹⁰⁶ the Court of Appeals for the Fourth Circuit held that the use of the words "may

98. *Lamphier*, 714 F.2d at 335. The court did not address Virginia's CERCLA claims.

99. *Id.* at 337. The relevant portion of the citizen suit provision of RCRA provides:

Except as provided in subsection (b) or (c) of this section, any person may commence a civil action on his own behalf—

. . . .

(B) against any person, including the United States and any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution, and including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.

42 U.S.C.A. § 6972(a)(1)(B) (West Supp. 1985).

100. *Lamphier*, 714 F.2d at 337. The court indicated that had the parties been suing as individuals for their own economic gain, an injunction would not have been permitted.

101. *Id.* at 337, 338. In *Shafer v. United States*, 229 F.2d 124, 128 (4th Cir.), cert. denied, 351 U.S. 931 (1956), the Supreme Court held that the proper enforcement of an act of Congress concerned with the interest of the general public is to grant an injunction.

102. See *supra* note 99.

103. 42 U.S.C.A. § 6903(15) (West 1982).

104. See *supra* notes 77-82, 99-103 and accompanying text.

105. 42 U.S.C.A. § 6972(a) (West Supp. 1985) (emphasis added).

106. 556 F. Supp. 1301 (E.D.N.C. 1982), *rev'd*, 734 F.2d 159 (4th Cir. 1984).

present" did not specifically limit actions to emergency situations.¹⁰⁷ However, because the case was before the court on a motion to dismiss the complaint, the court declined to rule on exactly what circumstances constitute an "imminent and substantial endangerment."¹⁰⁸

Since the court in *Waste Industries* failed to interpret the RCRA provision, the interpretation of analogous language from CERCLA may provide some guidance. The court in *United States v. Reilly Tar & Chemical Corp.*¹⁰⁹ held that the facts alleged in the complaint were sufficient to establish an "imminent and substantial endangerment" under the injunction section¹¹⁰ of CERCLA. The contamination of drinking water threatening the Minneapolis-St. Paul metropolitan area and the closing of six wells in neighboring towns satisfied the imminent endangerment burden.¹¹¹ Since the wording is exactly the same in the CERCLA injunction section as in the RCRA citizen suit provision, *Reilly Tar* is arguably applicable by analogy.¹¹² This standard is still a very high one to meet. Whether a court will find that an imminent and substantial endangerment exists in a particular factual situation will depend on how strictly the court reads the standard.

As is apparent from the foregoing discussion, the federal laws do provide remedies for the states to clean up hazardous waste sites. These laws, however, are far from comprehensive and should not be considered a panacea for a state's hazardous waste problems. The next section focuses on efforts by various states to deal with the improper disposal of hazardous waste through their own legislative mechanisms.

II. STATE LEGISLATION ADDRESSING HAZARDOUS WASTE CLEANUP

Because only six hazardous waste sites have been cleaned up since CERCLA's enactment in 1980, the states cannot expect the federal Superfund alone to remedy all waste sites.¹¹³ Congress, in fact, envisioned

107. *Waste Industries*, 734 F.2d at 165.

108. *Id.* at 168. The motion to dismiss was made pursuant to FED. R. CIV. P. 12(b)(6).

109. 546 F. Supp. 1100 (D. Minn. 1982).

110. 42 U.S.C. § 9606 (1982).

111. *Reilly Tar*, 546 F. Supp. at 1110.

112. Compare 42 U.S.C. § 9606 (1982) with 42 U.S.C.A. § 6973 (West Supp. 1985).

113. 131 CONG. REC. S11,840 (daily ed. Sept. 20, 1985) (statement of Sen. Helms). Senator Helms noted that this averaged out to \$266 million per site. *Id.* Senator Stafford rebutted the argument by pointing out that each year the EPA faces two hundred emergency situations. Also, work had begun on 115 hazardous waste sites in 1985. *Id.* at S11,842.

The comments of Senator Helms and Senator Stafford were made during the debate over an extension of the Superfund, whose revenue-producing tax expired on September 30, 1985. The bill, as passed by the Senate, provides for \$7.5 billion to be allocated to the Superfund over a five-year period. H.R. 2005, amended by 99th Cong., 1st Sess., 131 CONG. REC. S12,184-209 (daily ed. Sept. 26, 1985). The EPA stated, in response to the proposal of the increase to \$7.5 billion, that \$5.3 billion is the maximum amount which could be man-

the states would use their own resources to carry out the cleanup of hazardous waste sites.¹¹⁴ Most states have enacted some type of legislation affecting hazardous waste cleanups.¹¹⁵ Often, this legislation is similar to CERCLA and designed primarily to allow state participation in a federally funded cleanup. Several states, however, have enacted legislation far more comprehensive than CERCLA, pioneering future developments for hazardous waste laws at the state level.¹¹⁶

A. *Relevant Issues When Examining State Statutes*

This discussion of various state statutes seeking to abate hazardous waste pollution includes four areas of primary interest. An initial issue concerns when state action is authorized under each statute. Secondly, the sources and uses of revenues in a state cleanup program are of interest since they vary from state to state and are crucial to the success of any state's program. Final areas of interest are the questions of liability and enforcement.

1. When a State Response is Authorized

Most state statutes simply provide general authority to clean up waste disposal sites. The Maine Hazardous Waste Fund,¹¹⁷ for example, allows disbursement of funds for costs incurred in the removal of any "unlicensed discharge or threatened discharge of hazardous waste."¹¹⁸ In contrast, a few states authorize a response only in emergency situations. Nevada has a narrowly drafted statute which allows use of its fund only when there is "substantial threat to life or property."¹¹⁹ A statute of this type is significantly narrower than CERCLA, which allows a response in the event of any actual or threatened release of a hazardous substance.¹²⁰ The narrow authority provided under a statute allowing only an emergency response is probably not sufficient to allow the state to assume authority for federally funded cleanup actions under CERCLA where there is no substantial or imminent endangerment to the public health or environment.¹²¹

aged effectively. Letter from Administrator Lee M. Thomas to Senator Jesse Helms (July 18, 1985), reprinted in 131 CONG. REC. S11,841 (daily ed. Sept. 20, 1985).

114. *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1047 (2d Cir. 1985).

115. Comment, *State Hazardous Waste Superfunds and CERCLA: Conflict or Complement?*, 13 ENVTL. L. REP. (ENVTL. L. INST.) 10,348, 10,348 (1983).

116. *Id.*

117. ME. REV. STAT. ANN. tit. 38, § 1319-E (Supp. 1979-1985).

118. *Id.*

119. NEV. REV. STAT. § 353.263 (1985).

120. 42 U.S.C. § 9604(a)(1)(A) (1982); see also *supra* notes 14-16 and accompanying text (describing types of responses authorized under CERCLA).

121. Since CERCLA requires the state to enter into a contract or cooperative agreement

2. Sources and Uses of State Superfunds

State hazardous waste response funds generally are financed by one or more of the following sources: (1) "front-end" taxes on production of hazardous materials, (2) "waste-end" taxes on the treatment, storage, or disposal of hazardous waste, (3) general revenues, (4) bonds, (5) reimbursements from responsible parties, and (6) penalties or fines.¹²² Most states with specific legislation governing hazardous waste management impose taxes or fees on the generators of hazardous waste or the operators of disposal facilities.¹²³ State tax revenues, however, may not be used to finance a state fund that compensates for the same expenses that are eligible for recovery from the federal Superfund.¹²⁴ Many states also expend

with the federal government assuring future care and maintenance of facilities, *see supra* notes 26-30 and accompanying text, states with only emergency response authority may not be able to meet these standards.

122. Note, *Allocating the Costs of Hazardous Waste Disposal*, 94 HARV. L. REV. 584, 597-603 (1981).

123. The following state statutes use taxes or fees from hazardous waste generators or disposal facilities as a source of revenues for a state superfund: ARIZ. REV. STAT. ANN. § 36-2805 (Supp. 1975-1985); CAL. HEALTH & SAFETY CODE § 25330(d) (West 1984); CONN. GEN. STAT. ANN. § 22a-132 (West 1985); FLA. STAT. ANN. § 403.725(3)(b) (West Supp. 1974-1985); ILL. ANN. STAT. ch. 111½, § 1022.2(b) (Smith-Hurd Supp. 1985); IND. CODE ANN. § 13-7-8.6-11(c) (Burns Supp. 1985); KAN. STAT. ANN. § 65-3431(v)(1) (Cum. Supp. 1984); KY. REV. STAT. ANN. § 224.876(7) (Baldwin Supp. 1984); ME. REV. STAT. ANN. tit. 38, § 1319-J (Supp. 1979-1985); MD. HEALTH & ENVTL. CODE ANN. § 7-219 (Cum. Supp. 1985); MICH. COMP. LAWS ANN. § 299.529 (West 1984); MINN. STAT. ANN. § 115B.20(4)(a) (West Supp. 1986); MISS. CODE ANN. § 17-17-53 (Cum. Supp. 1985); MO. ANN. STAT. § 260-475(1) (Vernon Supp. 1986); NEV. REV. STAT. § 459.530 (1985); N.H. REV. STAT. ANN. § 147-B:8 (Cum. Supp. 1985); N.Y. ENVTL. CONSERV. LAW § 27-0923 (McKinney 1984); OHIO REV. CODE ANN. § 3734.18 (Baldwin Supp. 1985); OR. REV. STAT. § 459.610 (Repl. Vol. 1983); S.C. CODE ANN. § 44-56-170 (Law. Co-op. Supp. 1985); TENN. CODE ANN. § 68-46-203 (Cum. Supp. 1985); VA. CODE ANN. § 32.1-178(A)(11) to -178(A)(15), -178(B) (Repl. Vol. 1985); WIS. STAT. ANN. § 144.441(3)(a) (West Supp. 1985).

Although the method of taxation varies from state to state, the damage potential of the waste generally is not correlated with the fee structure. In other words, a generator of highly toxic waste, in most circumstances, contributes the same as a generator of waste which is only mildly dangerous. *See Reese, State Taxation of Hazardous Materials*, 33 OIL & GAS TAX Q. 502, 503 (1985).

124. The United States Supreme Court recently held that a state fund may be preempted by CERCLA if used to finance the same expenses that may be paid out of the federal Superfund. *Exxon Corp. v. Hunt*, 54 U.S.L.W. 4249 (U.S. Mar. 10, 1986). Section 114(c) of CERCLA provides that a person cannot be required to contribute to a fund intended to pay expenses which may be compensated under CERCLA. 42 U.S.C. § 9614(c) (1982). The Supreme Court invalidated portions of a New Jersey spill fund that was created to finance expenses that also were eligible for Superfund money, as determined by the NCP. *Exxon Corp.*, 54 U.S.L.W. at 4255. The state is free, however, to use such funds for purposes not eligible for Superfund money, such as to compensate third parties for damages resulting from hazardous substance discharges or to conduct research. *Id.* In light of this decision, many states may find it necessary to limit the uses of their hazardous waste funds and taxing mechanisms to assure that they are not preempted by CERCLA.

revenues from the general state treasury and seek reimbursements from parties responsible for the release of hazardous waste.¹²⁵

Most of the states with specially created response funds allow such funds to be used in financing some or all of the cleanup actions authorized under CERCLA.¹²⁶ The exceptions are those states granting very limited authority for emergency, short-term responses rather than authorizing a full remedial response.¹²⁷ The broader statutes encompass joint federal-state actions under CERCLA and can be used to provide the state's mandatory ten percent contribution which is required for a federally funded site cleanup.¹²⁸

Although most state funds are created primarily to provide financial resources for response actions, several state funds have much broader ap-

125. Thirteen states use revenues from their state treasury to clean up hazardous waste sites. ARIZ. REV. STAT. ANN. § 36-1854.01 (Supp. 1975-1985); CAL. HEALTH & SAFETY CODE § 25300 (West 1984); FLA. STAT. ANN. § 403.725(3)(a) (West Supp. 1974-1985); ILL. ANN. STAT. ch. 111½, § 1022.2(b)(3) (Smith-Hurd Supp. 1985); LA. REV. STAT. ANN. § 30:1079 (West Supp. 1985); MINN. STAT. ANN. § 115B.20(4)(d) (West Supp. 1986); MO. ANN. STAT. § 260.480(1) (Vernon Supp. 1986); N.H. REV. STAT. ANN. § 147-B:3 (Cum. Supp. 1985); N.M. STAT. ANN. § 74-4-8 (1983); N.C. GEN. STAT. § 143-215.87 (1983); OKLA. STAT. ANN. tit. 63, § 1-2018 (West 1984); TEX. WATER CODE ANN. § 26.304 (Vernon Supp. 1986); WIS. STATE ANN. § 144.76(6) (West Supp. 1985).

The following states seek reimbursement from responsible parties as a source of revenues for a cleanup fund: CAL. HEALTH & SAFETY CODE § 25330(a), (g) (West 1984); COLO. REV. STAT. § 29-22-104 (Cum. Supp. 1985); CONN. GEN. STAT. ANN. § 22a-451 (West 1985); FLA. STAT. ANN. § 403.725(3)(d) (West Supp. 1985); KY. REV. STAT. ANN. § 224.877(6)(a) (Baldwin 1982); LA. REV. STAT. ANN. § 30:1079 (West Supp. 1986); MD. HEALTH & ENVTL. CODE ANN. § 7-221(a) (Cum. Supp. 1985); MINN. STAT. ANN. § 115B.20(4)(b) (West Supp. 1986); MO. ANN. STAT. § 260.530 (Vernon Supp. 1986); NEV. REV. STAT. § 459.530 (1985); N.M. STAT. ANN. § 74-4-7(C) (1983); N.C. GEN. STAT. § 143-215.88 (1983); OHIO REV. CODE ANN. § 3734.22 (Baldwin Supp. 1985); VT. STAT. ANN. tit. 10, § 1274 (1984); WIS. STAT. ANN. § 144.441 (West Supp. 1985).

126. ARIZ. REV. STAT. ANN. § 36-1854.01 (Supp. 1975-1985); CAL. HEALTH & SAFETY CODE § 25350 (West 1984); CONN. GEN. STAT. ANN. § 22a-133 (West 1985); FLA. STAT. ANN. § 403.725 (West Supp. 1974-1985); ILL. ANN. STAT. ch. 111½, § 1022.2(d) (Smith-Hurd Supp. 1985); IND. CODE ANN. § 13-7-8.6-11 (Burns Cum. Supp. 1985); KAN. STAT. ANN. § 65-3431 (Cum. Supp. 1984); KY. REV. STAT. ANN. § 224.876 (Baldwin Supp. 1985); ME. REV. STAT. ANN. tit. 38, § 1319 (Supp. 1979-1985); MD. HEALTH & ENVTL. CODE ANN. § 7-219 (Cum. Supp. 1985); MINN. STAT. ANN. § 115B.20(2)(b) (West Supp. 1986); MO. ANN. STAT. § 260.480(2) (Vernon Supp. 1986); NEV. REV. STAT. § 459.530 (1985); N.H. REV. STAT. ANN. § 147-B:6 (Cum. Supp. 1985); N.J. STAT. ANN. § 58:10-23.11b (West Supp. 1985); N.Y. ENVTL. CONSERV. LAW § 27-0923 (McKinney 1984); N.C. GEN. STAT. § 143-215.87 (1983); PA. STAT. ANN. tit. 35, § 6018.701 (Purdon Supp. 1985); S.C. CODE ANN. § 44-56-170 (Law. Co-op. Supp. 1985); TEX. WATER CODE ANN. § 26.304 (Vernon Supp. 1986); WIS. STAT. ANN. § 144.441 (West Supp. 1985). Many of these superfunds are directed primarily at establishing a mechanism to participate in the federal cleanup scheme. See *supra* note 116 and accompanying text.

127. See, e.g., N.M. STAT. ANN. § 74-4-7 (1983). Response actions are authorized for only 48 hours without court approval.

128. Before EPA will conduct a remedial action, the state must assure payment of 10% of the cost plus assume the total cost of future site maintenance. 42 U.S.C. § 9604(c)(3) (1982); see also *supra* notes 27-30 and accompanying text.

plications. A number of state "superfunds" compensate for natural resource damages.¹²⁹ California, Illinois, Louisiana, and Minnesota also provide funds for hazardous waste research.¹³⁰

A few states extend coverage beyond CERCLA by providing for compensation to third parties. California's statute will reimburse uninsured medical expenses and a portion of lost wages if a responsible party cannot be found or a judgment against the responsible party cannot be satisfied.¹³¹ The New Jersey fund will compensate third parties for "all direct and indirect damages" from a hazardous waste release.¹³²

3. Liability Provisions

Although many states adopt the CERCLA liability provisions¹³³ to identify responsible parties, some states have adopted variations. Minnesota, for example, limits liability of both transporters and innocent land purchasers to circumstances where these parties knew or should have known about the hazardous waste.¹³⁴

Strict liability is considered by many to be the best way of appropriately distributing the costs of hazardous waste cleanup. The Senate Committee on Environmental and Public Works stated:

The goal of assuring that those who caused chemical harm bear the costs of that harm is addressed . . . by the imposition of liability. Strict liability . . . assures that those who benefit financially from a commercial activity internalize the health and environmental costs of that activity into the costs of doing business. Strict liability is an important instrument in allocating the risks imposed upon society by the manufacture, transport, use, and disposal of inherently hazardous substances.

To establish provisions of liability any less than strict, joint, and several liability would be to condone a system in which innocent victims bear the actual burden of releases, while those who conduct commerce in hazardous substances which cause such damage benefit with relative impunity.¹³⁵

129. Compensation for natural resource damages is provided in the following state statutes: CAL. HEALTH & SAFETY CODE § 25352 (West 1984); MD. HEALTH & ENVTL. CODE ANN. § 7-220(b)(1) (Cum. Supp. 1985); MINN. STAT. ANN. § 115B.20(2)(f) (West Supp. 1986); N.J. STAT. ANN. § 58:10-23.11g (West 1982); N.C. GEN. STAT. § 143-215.87 (1983); see also *supra* note 124 and accompanying text.

130. CAL. HEALTH & SAFETY CODE § 25351(a)(6) (West Supp. 1986); ILL. ANN. STAT. ch. 111½, § 1022.2(3) (Smith-Hurd Supp. 1985); LA. REV. STAT. ANN. § 30:1065.2 (West Supp. 1976-1985); MINN. STAT. ANN. § 115B.20(2)(h) (West Supp. 1986).

131. CAL. HEALTH & SAFETY CODE § 25375 (West Supp. 1986).

132. N.J. STAT. ANN. § 58:10-23.11g (West 1982); see *supra* note 124 and accompanying text.

133. See *supra* note 18 for a list of responsible parties under CERCLA.

134. MINN. STAT. ANN. § 115B.03(1) (West Supp. 1986).

135. S. REP. No. 848, *supra* note 1, at 13. The Senate Report recommended passage of the

While several states expressly impose strict liability¹³⁶ most of these same states also provide defenses similar to those enumerated in CERCLA.¹³⁷

Joint and several liability is imposed by some state statutory provisions.¹³⁸ Other states take varying approaches in determining the extent of damage for which a responsible party is liable. Florida requires that, if divisible, liability must be apportioned among the responsible parties.¹³⁹ California requires each party to demonstrate appropriate damages by a preponderance of the evidence. Failing adequate proof, costs are apportioned at the court's discretion.¹⁴⁰ A few states allocate damages on a pro rata basis, requiring a determination of each party's degree of fault.¹⁴¹

Some state statutes establish private damage liability standards allowing a readily available cause of action for private parties damaged by releases of hazardous waste. These provisions are invaluable to the state's citizens because plaintiffs often cannot obtain relief through the common law tort system.¹⁴² For example, many toxic substances result in injuries that could potentially have multiple etiologies,¹⁴³ making proof of causation within "reasonable medical certainty," as required at common law, extremely difficult.¹⁴⁴

Minnesota has a fairly comprehensive scheme for establishing liability for private damages, allowing recovery for both personal injury and economic loss caused by the release of hazardous substances.¹⁴⁵ Massachusetts allows third-party actions by persons sustaining damages to real or

proposed Environmental Emergency Response Act, which was the Senate version of the bill eventually enacted as CERCLA. For a general discussion of the proposed bills which contributed to CERCLA, see Grad, *supra* note 10.

136. See, e.g., MINN. STAT. ANN. § 115B.05(1) (West Supp. 1986).

137. For a list of defenses recognized under CERCLA, see *supra* note 20 and accompanying text.

138. See, e.g., FLA. STAT. ANN. § 403.725(5) (West Cum. Supp. 1985); MINN. STAT. ANN. § 115B.05(1) (West Supp. 1986). Although CERCLA does not specifically address joint and several liability, several courts have construed the statute in this manner. See, e.g., *United States v. A & F Materials Co.*, 578 F. Supp. 1249 (S.D. Ill. 1984).

139. FLA. STAT. ANN. § 403.141(2) (West Supp. 1974-1985).

140. CAL. HEALTH & SAFETY CODE § 25363(b) (West Supp. 1986).

141. See, e.g., MASS. ANN. LAWS ch. 21E, § 5 (Michie/Law Co-op. Supp. 1985).

142. See Note, *A Suggested Remedy for Toxic Injury: Class Actions, Epidemiology, and Economic Efficiency*, 26 WM. & MARY L. REV. 497 (1985).

143. See Davis, *Cancer in the Workplace—The Case for Prevention*, 23 ENV'T 25, 29 (1981).

144. See Note, *supra* note 142, at 519.

145. MINN. STAT. ANN. § 115B.05 (West Supp. 1977-85). Economic loss includes: destruction of real or personal property, including relocation costs; loss of use of property; and loss of past or future income from property which is damaged or destroyed. *Id.* § 115B.05(1)(a). This statute also encompasses damages for death, personal injury, and disease including: medical expenses, rehabilitation costs, or burial expenses; loss of past or future income; and damages for pain and suffering. *Id.* § 115B.05(1)(b).

personal property as a result of the release of hazardous waste.¹⁴⁶ North Carolina allows private damage claims only for property damaged by a hazardous substance released into state waters.¹⁴⁷ Two states, Alaska¹⁴⁸ and North Dakota,¹⁴⁹ have no cleanup fund, but do provide a statutory cause of action for damages caused by hazardous waste. Thus, once a plaintiff is able to clear the causation hurdle, varying degrees of recovery may be allowed depending on the statutory scheme.¹⁵⁰

4. Enforcement

One method of enforcing compliance with cleanup requirements is to restrict statutorily the transfer of ownership of land which is used for waste disposal.¹⁵¹ These restrictions typically prohibit transfer of land used as a hazardous waste disposal site without prior notice to the local environmental regulatory agency. New Jersey's Environmental Cleanup Responsibility Act (ECRA)¹⁵² is an example of this approach. The owner of an industrial establishment who is planning to terminate or transfer operations must notify the New Jersey Department of Environmental Protection and submit a cleanup plan.¹⁵³ In most instances, the cleanup must be completed prior to closing the transaction.¹⁵⁴ Failure to comply with these requirements results in severe sanctions. If the transferor fails to comply, the transferee may void the sale and recover damages from the transferor for cleanup costs.¹⁵⁵ In addition, any person who fails to comply with ECRA requirements may be fined up to \$25,000 per day if the

146. MASS. ANN. LAWS ch. 21E, § 5(a)(iii) (Michie/Law Co-op. Supp. 1985).

147. N.C. GEN. STAT. § 143-215.93 (Repl. Vol. 1983).

148. ALASKA STAT. § 46.03.822 (1977).

149. N.D. CENT. CODE § 32-40-06 (Repl. Vol. 1976).

150. Efforts have been made to reduce the level of causation a plaintiff is required to show. Under a former Minnesota statutory provision, a court could not direct a verdict against the plaintiff if the following criteria were met:

(a) the defendant is a person who is responsible for the release;

(b) the plaintiff was exposed to the hazardous substance;

(c) the release could reasonably have resulted in plaintiff's exposure to the substance in the amount and duration experienced by the plaintiff; and

(d) the death, injury, or disease suffered by the plaintiff is caused or significantly contributed to by the exposure to the hazardous substance in an amount and duration experienced by the plaintiff.

MINN. STAT. ANN. § 115B.07 (West Supp. 1977-85), *repealed* by Laws 1985, ch.8, § 19 (West Supp. 1977-1985). This section also expressly stated that evidence of causation to a "reasonable medical certainty" was not needed. *Id.*

151. *See, e.g.,* ILL. ANN. STAT. ch. 111½, § 1021(n) (Smith-Hurd Supp. 1985). This approach represents an attempt to avoid future hazardous waste problems on sites which have been sold or abandoned.

152. N.J. STAT. ANN. § 13:1K-6 to -18 (West Supp. 1985).

153. *Id.* § 13:1K-9.

154. *Id.* § 13:1K-11(a).

155. *Id.* § 13:1K-13(c).

offense is of a continuing nature.¹⁵⁶ These requirements are designed to promote expeditious cleanup of industrial sites and encourage businesses to engage in more environmentally sound operations.¹⁵⁷

A growing number of states, including New Jersey, have developed an innovative provision granting state officials authority to conduct any necessary cleanup and then levy a "superlien" against the responsible party.¹⁵⁸ This liability constitutes a lien on real or personal property which takes priority over all other liens or interests in the property.

A recent controversy has surrounded the issue of a state's power to enforce an injunction or require a hazardous waste cleanup prior to a sale of the property in bankruptcy proceedings. The United States Supreme Court recently ruled in *Ohio v. Kovacs*¹⁵⁹ that an obligation to clean up a hazardous waste site constitutes a "debt" or "liability on a claim" which is dischargeable under the Bankruptcy Code. Justice O'Connor's concurring opinion, however, indicates that the Court's holding does not leave the state totally without recourse to enforce environmental orders.¹⁶⁰ The appropriate manner for a state to protect its interest is to give cleanup judgments the status of statutory liens or secured claims which can then be given priority over the claims of other creditors.¹⁶¹ A "superlien" provision, therefore, allows a state to secure its interest in assuring adequate site cleanup, as suggested by Justice O'Connor.

III. VIRGINIA'S MECHANISMS TO CLEAN UP HAZARDOUS WASTE

A. Existing Provisions

Virginia's statutory provisions governing hazardous waste management function primarily as a state program enacted to conform to RCRA requirements.¹⁶² The State Board of Health (Board) is granted authority for a variety of hazardous waste management functions. Acting through the Bureau of Hazardous Waste Management, the Board exercises gen-

156. *Id.*

157. For a general discussion of New Jersey's statutory scheme, including the competing concerns for both industry and environmental protection, see Lesniak, *The Statutory Treatment of Wastes: A Legislator's Perspective*, 7 SETON HALL LEGIS. J. 35 (1983).

158. Connecticut, Massachusetts, New Hampshire, New Jersey, and Ohio use "superliens" as an enforcement tool. CONN. GEN. STAT. ANN. § 22a-452a (West 1985); MASS. ANN. LAWS ch. 21E, § 13 (Michie/Law Co-op. Supp. 1985); N.H. REV. STAT. ANN. § 147-B:10(III) (Cum. Supp. 1983); N.J. STAT. ANN. § 58:10-23.11f(f) (West Cum. Supp. 1985); OHIO REV. CODE ANN. § 3734.22 (Baldwin Supp. 1984).

159. 105 S. Ct. 705, 710 (1985).

160. *Id.* at 712 (O'Connor, J., concurring).

161. *Id.*

162. VA. CODE ANN. §§ 32.1-177 to -186 (Repl. Vol. 1985). Under 42 U.S.C.A. § 6926 (West 1983 & Supp. 1985), states may operate authorized hazardous waste management programs in lieu of EPA. See *supra* note 87.

eral supervision over hazardous waste management activities¹⁶³ and may obtain any available federal funds.¹⁶⁴ Subject to the Governor's approval, and the approval of the Hazardous Waste Facility Siting Council,¹⁶⁵ the Board may acquire appropriate hazardous waste facility sites by right of eminent domain.¹⁶⁶

Additionally, the Board operates or provides for operation of hazardous waste facilities and assumes responsibility for perpetual custody.¹⁶⁷ Fees are collected from facility operators to help defray the costs of perpetual care and maintenance.¹⁶⁸ Assuming the state provides the required ten percent contribution necessary for a federally financed cleanup action, Virginia can demonstrate its intent to provide for the perpetual care of hazardous waste sites as required by CERCLA.¹⁶⁹

The commonwealth must rely upon its RCRA-related authority, broad powers of the Board of Health,¹⁷⁰ or the common law of nuisance to assure necessary hazardous waste cleanup. If the public is imminently and substantially affected by a release or threatened release of a toxic substance, this practice constitutes a public nuisance.¹⁷¹ The state, acting as the "guardian of the environment," can abate the problem by bringing suit for an injunction.¹⁷² In *Environmental Defense Fund, Inc. v. Lamphier*,¹⁷³ the State Department of Health obtained an injunction against the operator of a disposal facility where the operator violated state and federal environmental laws and created a common law nuisance.¹⁷⁴ The defendant unsuccessfully argued that Virginia's hazardous waste management statute preempted any common law nuisance action since the federal pollution laws preempted the federal common law of nuisance.¹⁷⁵ Ac-

163. *Id.* § 32.1-178(1) to -178(8). This general supervision includes enacting and enforcing regulations governing the generation, transportation, treatment, storage, and disposal of hazardous waste. The commonwealth also has the authority to issue permits to hazardous facilities which conduct treatment, storage, or disposal activities.

164. *Id.* § 32.1-178(9).

165. See VA. CODE ANN. §§ 10-186.1 to -186.21 (Repl. Vol. 1985).

166. *Id.* § 32.1-178(11).

167. *Id.* § 32.1-178(12), (13).

168. *Id.* § 32.1-178(14).

169. See 42 U.S.C. § 9604(c)(1)(A) (1982).

170. See, e.g., VA. CODE ANN. §§ 32.1-2, -13, -27 (Repl. Vol. 1985).

171. *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1051 (2d Cir. 1985); see also W. KEATON, PROSSER AND KEATON ON TORTS 640-41 (5th ed. 1984) (a threat constitutes grounds for granting an injunction).

172. *Shore*, 759 F.2d at 1051.

173. 714 F.2d 331 (4th Cir. 1983).

174. *Id.* at 336-37.

175. Defendant's argument relied upon *Middlesex County Sewerage Auth. v. National Sea Clammers Ass'n*, 453 U.S. 1, 14-15 (1981), which stated that "where a statute expressly provides a particular remedy or remedies, a court must be chary of reading others into it." The Fourth Circuit, however, distinguished *Sea Clammers*, indicating that the plaintiffs in *Sea Clammers* sought private relief, while the *Lamphier* plaintiffs sought to abate a public

ording to Virginia authority, in the absence of preemption by express statutory language or necessary implication, the common law remains unchanged.¹⁷⁶ Finally, the Virginia Disaster Response Fund (VDRF) does provide funds for costs and expenses incurred in preventing and alleviating "injurious environmental contaminations" caused by man-made or natural emergencies.¹⁷⁷

The primary shortcoming of Virginia's hazardous waste program is the lack of explicit statutory mechanisms to assure the cleanup of hazardous waste sites, particularly in cases where an imminent and substantial endangerment is difficult to show. The lack of any provision assuring financial responsibility for hazardous waste generators potentially leaves the state without a source to recoup the overwhelming costs of cleanup. Additionally, Virginia residents must still deal with the difficult common law tort requirements in order to recover personal loss resulting from the improper disposal of hazardous waste.

B. *Suggested Improvements*

The General Assembly should consider enacting a statute that gives the Board of Health the power to seek injunctive relief specifically against owners or operators of hazardous waste facilities who improperly treat, store, or dispose of hazardous waste. Such a provision would allow the Board to respond quickly to sites known to contain hazardous waste without having to show an "imminent and substantial endangerment." All improper management of hazardous waste presents an imminent hazard. Contamination of groundwater, however, might not occur for many years. State resources are better spent cleaning up abandoned sites that create a present endangerment, while responsible parties should be forced to clean up immediately sites that will become "imminent hazards" sometime in the future.

Virginia also needs a hazardous waste fund beyond that made available by the VDRF¹⁷⁸ to assure that financial resources are available for prompt response in the event of a hazardous waste release. A fund which draws upon several revenue sources will have an adequate supply of monies without unreasonably burdening any single source of financing. Missouri's Hazardous Waste Remedial Fund¹⁷⁹ provides an excellent model.

nuisance. *Lamphier*, 714 F.2d at 336-37.

176. *Id.* at 337. In reaching this conclusion, the court relied upon *Hannabass v. Ryan*, 164 Va. 519, 180 S.E. 416 (1935).

177. See VA. CODE ANN. §§ 44-146.16, .18:1 (Cum. Supp. 1985); see also *supra* notes 119-21 and accompanying text.

178. *Id.*

179. MO. ANN. STAT. § 260.391 (Vernon Supp. 1986). This fund receives revenues from hazardous waste generator fees, state appropriations, reimbursements from responsible parties, and fines and penalties. *Id.*

A provision specifying joint and several strict liability will simplify the claims process.

Virginia should also consider enacting a "superlien" provision as a part of its hazardous waste response program.¹⁸⁰ In light of the Supreme Court's decision in *Ohio v. Kovacs*,¹⁸¹ a state should grant a judgment for the cost of a hazardous waste cleanup status as a first priority lien. This action would minimize the risk of loss.

Finally, the legislature should consider a provision to allow citizens an improved avenue to seek remedy for toxic torts. Compensation directly from the state response fund may not be appropriate because this could impose a strain on funds that would be better used to actually clean up waste. A statutory provision specifying the liability and defenses of responsible parties would aid plaintiffs without burdening the state hazardous waste fund.

IV. CONCLUSION

The problem of hazardous waste sites cannot be solved overnight. RCRA's "cradle-to-grave" management system is designed to prevent the "Love Canals" of the future but, in the interim, states must assume an active role. The federal cleanup program established by CERCLA represents a significant step towards resolving the problems caused by improper hazardous waste disposal. The federal program, however, provides funds to clean up only the most serious sites and does not address many related issues such as economic loss and personal injury. State legislation in this area is sorely needed to assure adequate site cleanup and appropriate remedies for hazardous waste injuries. Agencies of the commonwealth should be able to rely on provisions of the Virginia Code in enforcing environmental laws rather than resorting to uncertain provisions and interpretations of federal law. This legislation should be designed to provide industry with an incentive to consider the environmental impact of daily business decisions. Vigorous state participation in this area is needed today in order to assure a clean and healthful environment tomorrow.

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180. See *supra* note 158 and accompanying text.

181. See *supra* notes 159-61 and accompanying text.

