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Colin Scott Cole Fulton

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HAZARDOUS WASTE: THIRD-PARTY COMPENSATION FOR CONTINGENCIES ARISING FROM INACTIVE AND ABANDONED HAZARDOUS WASTE DISPOSAL SITES

I. INTRODUCTION

Nearly 50,000 uncontrolled inactive¹ and abandoned² hazardous waste disposal sites presently exist in the United States, many of which pose substantial environmental dangers.³ The hazardous waste problem, considered by many to be today's most pressing environmental issue,⁴ is largely attributable to the sheer volume of hazardous waste generated by modern industrial processes. The approximately 750,000 hazardous waste generators in this country, many of which manufacture useful products such as medicines, textiles, petroleum products, leather, and paints,⁵ annually produce nearly sixty million metric tons of hazardous by-products.⁶ Unless returned to the cycle of production,

1. A disposal site is inactive when the disposer or other responsible party has discontinued operations but still owns or occupies the site. See *Hazardous Waste Disposal Report Together with Additional and Separate Views by the Subcomm. on Oversight and Investigations in the House Comm. on Interstate and Foreign Commerce*, 96th Cong., 1st Sess. 63 (1979) (statement of Rep. Albert Gore, Jr.) [hereinafter cited as *1979 Oversight Report*].

2. Abandoned sites are those inactive sites for which disposers or other responsible parties are no longer identifiable. *Id.*

3. 9 ENVIR. REP. (BNA) 2085 (1979). See notes 12-13 and accompanying text *infra* for a discussion of specific dangers posed by these sites.

4. 10 ENVIR. REP. (BNA) 194 (1979); 45 Fed. Reg. 33,084 (1980).

5. OFFICE OF WATER AND WASTE MANAGEMENT, U.S. ENVIRONMENTAL PROTECTION AGENCY, *EVERYBODY'S PROBLEM: HAZARDOUS WASTE* 13 (SW-826) (1980). The societal utility of some goods produced for a modern throw-away society, such as many plastic products, may, however, be outweighed by the detriments of their hazardous by-products.

6. OFFICE OF PUBLIC AWARENESS, U.S. ENVIRONMENTAL PROTECTION AGENCY, *HAZARDOUS WASTE—FIFTEEN YEARS AND STILL COUNTING* 2 (OPA 98) (1980) [hereinafter cited as *FIFTEEN YEARS*]. In South Carolina alone, 800 hazardous waste generators produce three million tons of hazardous waste annually. South Carolina Department of Health and Environmental Control, *Hazardous Waste Generated in South Carolina for 1980* (October 1980) (unofficial report).

these substances must be disposed of in one form or another.⁷ Contributing to the problem is the "deplorable practice [of industry] which has prevailed throughout our history—the practice of disposing of waste, hazardous or not, in the cheapest and easiest way possible."⁸ Disposal without regard for the environment, as by indiscriminate dumping, is, of course, the cheapest approach, and as much as 90% of the hazardous waste generated has been managed "in a manner which potentially threatens human health and the environment."⁹

The costs associated with releases¹⁰ of hazardous substances caused by this past mismanagement of waste can be enormous.¹¹ These costs fall into two categories, those sustained by the environment and the general public and those incurred by individual third parties. The first class of costs comprises environmental losses such as the contamination of groundwater, rivers, lakes, and streams, and the destruction of aquatic life, wildlife, and vegetation;¹² it also includes the costs of correcting conditions that threaten public health and the environment. The second class of costs, sustained by individual third parties, includes loss of property value, property damage, and physical injury caused by direct or indirect contact¹³ with hazardous substances.¹⁴

7. This is required by the principle of conservation of matter. See 1 F. GRAD, TREATISE ON ENVIRONMENTAL LAW § 4.01(1) (1979). The technology presently exists for reclaiming and reusing many hazardous wastes. The government's failure to provide incentives for resource recovery, however, has discouraged use of the available technology. U.S. ENVIRONMENTAL PROTECTION AGENCY, DECISION-MAKERS GUIDE IN SOLID WASTE MANAGEMENT, 126 (SW-500) (1976).

8. FIFTEEN YEARS, *supra* note 6, at 1.

9. 45 Fed. Reg. 33,084 (1980).

10. A "release" generally includes "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. . . ." 42 U.S.C. § 9601(22) (Supp. 1980).

11. The ultimate cost of remedying problems caused by uncontrolled sites could approach \$50 billion. 10 ENVIR. REP. (BNA) 193 (1979). At Love Canal, near Niagara Falls, New York, homes and a school were built adjacent to a landfill where hazardous waste had been buried twenty-five years earlier. As the drums holding the waste corroded, their contents seeped into yards and basements, forcing evacuation of over 200 families in 1978 and 1979. Residents of the area have exhibited a high incidence of birth defects, miscarriages, and other maladies. The costs of the Love Canal incident alone may exceed \$20 million. 1979 Oversight Report, *supra* note 1, at 9-24.

12. Indirect contact can occur through a number of mechanisms such as groundwater contamination, air pollution, fire and explosion, and surface water contamination.

13. The Environmental Protection Agency has on file hundreds of cases of harm to human health, most of which have resulted from the contamination of groundwater—the drinking water source for one-half of the nation's population. Moreover, vapors from

In partial recognition of these costs, state and federal legislatures have developed massive hazardous waste regulatory programs designed to prevent long-range and large-scale environmental pollution and to clean up problem disposal sites. These programs, however, generally ignore the plight of innocent third parties victimized by inactive and abandoned waste sites. Furthermore, insurance carried by the victim or the polluter normally fails to fully compensate these third-party victims. Consequently, for complete recovery for injuries caused by inactive and abandoned waste sites, victims must seek redress in the courts.

The common-law approach to recovery for hazardous waste injuries, however, is riddled with uncertainties. Statutes of limitation and causation problems may present formidable barriers to recovery. Moreover, the independent contractor rule may inhibit recovery from the only parties associated with the harm who are likely to be solvent, the generators of the injurious waste. In sum, traditional legal theories are ineffective "for large-scale pollution affecting large numbers of persons, where the source is difficult to trace, the causative link is hard to establish, or public policy is opposed to terminating the polluting activity or even burdening the polluting enterprise with the full cost of compensating all damages."¹⁵ In view of these uncertainties, further legislation defining the rights of innocent victims and the liabilities of hazardous waste polluters is needed.

Because the present hazardous waste regulatory program is aimed at minimizing the first category of hazardous waste costs—those of correcting conditions that threaten the public health and the environment, this Note focuses on the second category of costs—those incurred by individual third parties—and on the lack of adequate compensation for losses suffered by victims of inactive and abandoned hazardous waste disposal sites, and suggests a need for more protective hazardous

problem disposal sites have been linked to skin diseases, respiratory illnesses, and high levels of toxic materials in the circulatory systems of humans and livestock. Mismanagement of hazardous waste has also generated poisonous gases, which have injured and killed firemen and workers and have caused fires and explosions. 45 Fed. Reg. 33,085 (1980).

14. 42 U.S.C. §§ 3251-3259 (1976).

15. Pfennigstorf, *Environment, Damages, and Compensation*, 2 AM. B. FOUNDATION RESEARCH J. 347, 353-54 (1979).

waste legislation.

II. RECOVERY UNDER EXISTING HAZARDOUS WASTE LEGISLATION

Although Congress initially recognized the hazardous waste problem in the Solid Waste Disposal Act of 1965,¹⁶ the Resource Conservation and Recovery Act of 1976 (R.C.R.A.) was a serious attempt to address the problem.¹⁷ R.C.R.A. was designed to "establish the statutory framework for a national system which would insure the proper management of hazardous waste."¹⁸ Subtitle C of the Act grants authority to the Environmental Protection Agency (EPA) to develop regulations that further the aims of R.C.R.A. and authorizes the development and implementation of state programs in lieu of the federal plan.¹⁹ As a result, massive regulatory packages have been developed at the state and federal level. These programs establish performance standards for generators, transporters, and hazardous waste facility operators;²⁰ utilize "cradle-to-grave" manifest systems that

16. 42 U.S.C. §§ 6901-6987 (1976).

17. 45 Fed. Reg. 33,085 (1980).

18. See 42 U.S.C. §§ 6922, 6926 (1976). A preference for state administration is indicated by the R.C.R.A.'s legislative history. See H.R. REP. NO. 1491, 94th Cong., 2d Sess. 11, 24, 29-33 (1976).

EPA authorization of a state's program is contingent on the satisfaction of three criteria: 1) equivalence to the federal program; 2) consistency with the federal program and other authorized state programs; and 3) adequate enforcement of compliance. 42 U.S.C. § 6926 (1976). States that had developed hazardous waste programs before the promulgation of federal regulations, however, could be granted authorization for a two-year interim period upon a showing of substantial equivalence to the federal program. *Id.* EPA has granted interim authorization for hazardous waste programs in Alabama, Arkansas, Delaware, Georgia, Iowa, Louisiana, Massachusetts, Mississippi, Montana, North Carolina, North Dakota, Oklahoma, South Carolina, Texas, Utah, and Vermont. THE JOURNAL, Apr., 1981, at 6 (news publication of the South Carolina Association of Industrial Waste Disposers).

19. Hazardous waste facilities are operations that treat, store, or dispose of hazardous waste. 40 C.F.R. § 260.10(21) (1980).

20. In May 1980, EPA issued its first phase of hazardous waste regulations. 40 C.F.R. §§ 260-265 (1980). EPA's regulations are supported by the R.C.R.A.'s enforcement provisions, which provide for civil penalties of not more than \$25,000 for each day of noncompliance and criminal sanctions in the event of wilful noncompliance. 42 U.S.C. § 6928 (1976).

The hazardous waste program in South Carolina is representative of the state programs that have received interim authorization from the EPA. See South Carolina Hazardous Waste Management Act, S.C. CODE ANN. §§ 44-56-10 to -190 (Supp. 1980); S.C. Dep't of Health and Environmental Control R., S.C. CODE ANN. (R. & REG.) 61-79 to 61-79.11 (Supp. 1980) (the South Carolina Hazardous Waste Management Regulations). Be-

track wastes from point of origin to final disposition; authorize the transportation, treatment, storage or disposal of hazardous waste only by permit; and impose reporting, recordkeeping, and monitoring requirements on hazardous waste managers.²¹

The regulatory program developed under R.C.R.A. makes significant advances toward "a national system which would insure the proper management of hazardous waste,"²² but because R.C.R.A. was enacted before "the Love Canal tragedy forced our attention on the magnitude of the residues of past neglect,"²³ its remedy is incomplete. The Act is prospective in nature and is directed at existing and future hazardous waste management facilities. Thus, it fails to address the substantial hazards posed by inactive and abandoned sites.²⁴

The recently proposed federal financial responsibility standards for hazardous waste facilities²⁵ are indicative of this oversight. These standards are designed to assure

cause the state's regulations were fashioned from federal guidelines and because substantial equivalence to the federal program is required for interim authorization, the state program is nearly identical to its federal counterpart.

21. See note 17 and accompanying text *supra*.

22. FIFTEEN YEARS, *supra* note 6, at 2.

23. 126 CONG. REC. H9159 (daily ed. Sept. 19, 1980) (remarks of Rep. Gore); Cohen & Derkics, *Financial Responsibility for Hazardous Waste Sites*, 9 CAP. U.L. REV. 509, 520 (1980). The R.C.R.A.'s "imminent hazard" provision, 42 U.S.C. § 6973 (1976), which allows the Administrator of EPA to bring suit to restrain persons whose disposal of waste presents an imminent hazard to health or the environment, or "to take such other action as may be necessary," but limits the possible action to remedial efforts in cases when the party responsible for the waste site is available and solvent. It cannot be used to compensate third-party victims of inactive and abandoned sites, therefore, but may be useful in cleaning up some nonabandoned, inactive sites.

R.C.R.A.'s failure adequately to address the problem of inactive sites is not its only shortcoming. It does not effectively attack the hazardous waste problem at its source: the annual generation of sixty million metric tons of hazardous waste. The Act does not encourage or compel efficiency in production processes that will lead to decreased output of waste. Although the legislation is entitled the Resource Conservation and Recovery Act, the program it created has thus far emphasized disposal rather than conservation and recovery. The only incentive presently provided for recycling and reclaiming waste is avoidance of the costs of disposal and the costs of complying with the regulations. Those wastes that are reused or reclaimed are excused from regulation. 40 C.F.R. § 261.6 (1980).

24. 46 Fed. Reg. 2851-88 (1981) (to be codified 40 C.F.R. §§ 264, 265). These regulations were implemented October 13, 1981. 5 CHEM. REG. REP. (BNA) 170 (1981). Financial responsibility standards are currently in effect in some states. *E.g.*, S.C. Dep't of Health and Environmental Control R., S.C. CODE ANN. (R & REG.) 61-79.5 (Supp. 1980).

25. 46 Fed. Reg. 2821 (1981).

(1) that funds will be available for proper closure of facilities that treat, store, or dispose of hazardous waste and for post-closure care of hazardous waste disposal sites; and (2) that a pool of funds will be available during the operating life of the facility from which third parties can seek compensation for injuries to people and property resulting from operation of the facilities.²⁶

Although these provisions improve the possibilities of recovery for injuries arising from active disposal facilities, they offer no relief for the victims of inactive and abandoned sites.²⁷

Congressional recognition of the inadequacy of R.C.R.A. led to enactment of the Comprehensive Environmental Responses, Compensation, and Liability Act of 1980.²⁸ This Act attempts to fill the gaps left by R.C.R.A. by creating a \$1.6 billion hazardous waste "Superfund,"²⁹ financed primarily by an excise tax on

26. The new administration of the Environmental Protection Agency is at present considering a proposal to suspend permanently the federal requirements for liability insurance, leaving to the states the task of regulating insurance requirements. 12 ENVIR. REP. (BNA) 557 (1981). Because adoption of this proposal might place victims of existing permitted disposal sites in much the same situation as victims of abandoned and inactive sites—unable to obtain compensation because of the polluter's insufficient assets—it may constitute a "major crippling of R.C.R.A., and a major setback in the [federal] regulatory program. . . ." *Id.*

27. 92 U.S.C. §§ 9601-9657 (Supp. 1980).

28. See WASTE AGE, Jan. 1981, at 20; SOLID WASTES MANAGEMENT, Jan. 1981, at 18. The Act creates two funds, a general response fund (Superfund) and a \$200 million post-closure liability fund financed by a \$2.13 tax on each ton of hazardous waste disposed of at permitted facilities. The post-closure fund will be used to clean up releases from closed permitted facilities, to pay for damages to natural resources up to \$50 million, and to compensate for injury or property loss resulting from such releases.

29. See 126 CONG. REC. H9159 (daily ed. Sept. 19, 1980) (remarks of Rep. Gore). The fee system established by Superfund reflects a congressional attitude that the industry which benefited from and was primarily responsible for past mismanagement of hazardous waste, rather than the general public, should bear the brunt of clean up costs. The chemical industry will pass on the costs of fund contributions to consumers of their products who presumably have also benefited from past inexpensive disposal practices.

Although the chemical industry is responsible for the problem, many individual manufacturers may not have contributed to the problem. This fact has led to criticism that the bill punishes "the innocent along with the guilty," *id.* at H9160 (remarks of Rep. Broyhill), and may lead to constitutional challenge of the Act. The Chemical Manufacturers Association, in a statement presented to the Senate Committee on Environment and Public Works, argued that this type of fee system amounts to an unconstitutional bill of attainder because "it applies to easily ascertainable members of a group in such a way as to inflict punishment on them without judicial trial." Note, *Superfund Proposed to Clean Up Hazardous Waste Disasters*, 20 NAT. RESOURCES J. 615, 620 n.45 (1980) (citing CMA AND SUPERFUND (July 19, 1979)).

crude oil, petrochemical feedstocks, and certain inorganic toxic substances. The Superfund is to be used to defray the costs of cleaning up inactive and abandoned hazardous waste sites³⁰ and to pay for damages to natural resources caused by the release of waste from these sites. Under the Act, operators of problem disposal sites, transporters of waste to the sites, and generators of substances found at the sites are held strictly liable to the fund for any disbursement made.³¹

Certainly, Superfund is a step toward the resolution of some of the difficulties presented by inactive and abandoned hazardous waste sites, but it fails to compensate private parties for personal injuries and property damages caused by releases from inactive and abandoned sites.³² In this respect, Superfund represents a substantial compromise of the original contingency fund proposals. Several of the Superfund packages that were introduced provided substantial relief for third parties,³³ but Con-

30. The Act authorizes the President to initiate removal or remedial actions when the release of hazardous substances imminently and substantially endangers the public health or welfare. Section 101 of the Act defines "removal" as "the clean up or removal of released hazardous substances . . . , such actions . . . 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 protect] . . . public health . . . [and] . . . the environment." 42 U.S.C. § 9601 (Supp. 1980). Remedial action "means those actions consistent with permanent remedy taken instead of or in addition to removal actions . . . , 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 latter term includes such activities as storage and confinement of wastes, on-site treatment and incineration, repair of leaking containers, any necessary monitoring, and, in some instances, the costs of permanently relocating residents and businesses. *Id.* This final element is an obvious response to the Love Canal calamity. See note 11 *supra*.

31. 42 U.S.C. § 9607 (Supp. 1980). This cause of action reflects congressional recognition "that actions involving hazardous waste . . . [constitute] abnormally dangerous or ultrahazardous activity sufficient to subject a responsible party to strict liability." 126 CONG. REC. H9462 (1980) (daily ed. Sept. 23, 1980) (remarks of Rep. Gore). The Act limits the liability of most transporters to \$50 million and the liability of other defendants to the total costs of response plus \$50 million.

32. The only provision under the Act that may be of some value to third parties allows fund expenditures for epidemiologic studies, health effect studies and diagnostic services. These activities may offer some relief from the difficult task of showing a causal relationship between exposure to a particular waste and an adverse health effect. See 42 U.S.C. §§ 9604(i), 9611(c)(4) (Supp. 1980).

33. The Superfund legislation introduced by the Carter Administration offered limited compensation for property and economic damages to third parties. See S. 1341, 96th Cong., 1st Sess., 125 CONG. REC. S7694 (daily ed. June 14, 1979). The Environmental Response Act, introduced by Senators Muskie and Culver, would have compensated per-

gress, dissuaded by the level at which the fund would have to be maintained in order to compensate victims, rejected those proposals.³⁴

This reluctance to provide legislative relief for victims of inactive and abandoned hazardous waste sites also prevails at the state level.³⁵ Only four states have enacted legislation designed, at least in part, to compensate third-party victims.³⁶ Oregon and Alaska each have provided waste victims with a statutory cause of action against hazardous waste polluters. The Oregon law,³⁷ which is the more limited of the two laws, requires a showing that the person in control of the injurious waste violated a law or acted unreasonably in handling the waste. By requiring a showing that the polluter's conduct was not normal or reasonable, the statute in effect requires a plaintiff to establish a cause of action in negligence against the polluter.³⁸ The Alaska statute³⁹ goes further, holding a polluter strictly liable for damages

sonal injuries, property loss, and out-of-pocket medical expenses and would have provided relaxed causation requirements for victims of hazardous waste-related injuries. See S. 1480, 96th Cong., 1st Sess., 125 CONG. REC. S9179 (daily ed. July 11, 1979). Congressman LaFalce, whose congressional district includes the Love Canal site in Niagara Falls, New York, introduced a number of bills that proposed, among other things, a statutory cause of action for hazardous waste victims, a compensation fund for victims, and an ameliorated causation standard and statute of limitation. For a discussion of the Congressman's proposals, see Cohen & Derkics, *supra* note 23, at 522-24.

34. Sponsors of the bill were able to obtain its passage only by cutting the fund back to \$1.6 billion from an originally proposed \$4.2 billion, by eliminating provisions establishing joint and several liability for parties connected with problem sites, and by deleting the section allowing compensation for personal injuries and property damages. SOLID WASTES MANAGEMENT, Jan. 1981, at 18.

35. For a survey of state hazardous waste programs, see Cohen, *New Developments in State Hazardous Waste Legislation*, 9 CAP. U.L. REV. 489 (1980).

36. *See id.*

37. OR. REV. STAT. § 459.685 (1979). The statute provides *inter alia* that [a]ny person having the care, custody or control of a hazardous waste . . . who causes or permits any disposal of such waste . . . in violation of law or otherwise than as reasonably intended for normal . . . handling of such waste . . . shall be liable for the damages to person or property, public or private, caused by such disposition.

38. Prevailing in hazardous waste litigation on a negligence theory may be difficult. *See* note 86 *infra*.

39. ALASKA STAT. § 46.03.822 (1977) provides *inter alia* that "a person owning or having control over a hazardous substance which enters in or upon the waters, surface or subsurface lands of the state is strictly liable, without regard to fault, for the damages to persons or property, public or private, caused by the entry."

A "hazardous substance" is defined by the Act to include "an element or compound which, when it enters in or upon the waters or surface or subsurface lands of the state,

to persons or property caused by the discharge of a hazardous substance over which he had control. Although these statutes, particularly the Alaska provision, may be of significant utility to waste victims in some cases, the remedy they provide may be incomplete. Because both acts consider as defendants only persons "in control" of the waste at the time of discharge, the action may not extend to generators of wastes who no longer have direct control.⁴⁰ Consequently, when the person who "controlled" the waste is unknown or insolvent, as is usually the case with abandoned sites, recovery may not be possible under either the Oregon or Alaska statutes.

Two other states, South Carolina and New Jersey, have established administrative funds similar to the Superfund that may provide relief for third-party hazardous waste victims. The South Carolina Hazardous Waste Fund⁴¹ allows for compensation of victims of "preexisting abandoned" sites upon a showing that a good faith effort has been made to secure and enforce a valid judgment against the responsible party.⁴² This approach, although helpful, is insufficient because it requires claimants to suffer the expense and uncertainty of litigation to avail themselves of the fund.⁴³ As a result, low income victims who are una-

presents an imminent and substantial danger to the public health or welfare. . . ." *Id.* § 46.03.826(3)(A).

40. An argument can be made under the Alaska statute that a generator still "owns" his wastes even though another party disposes of them for him. *See id.* § 46.03.826(5).

41. S.C. CODE ANN. §§ 44-56-160 to -190 (Supp. 1980). The South Carolina fund as initially created was a post-closure fund. Act 517, however, provided that

in the event a national hazardous waste fund is created by federal statute . . . [t]he [South Carolina] contingency fund . . . shall . . . become the South Carolina Hazardous Waste Fund to be used by the Department to defray the cost of mitigating any problems caused by preexisting abandoned hazardous waste storage or disposal sites.

Id. at § 44-56-160. Given the recent enactment of Superfund, the state fund is presumably now available for meeting contingencies arising from preexisting abandoned sites. The \$40 million fund is to be financed by a \$1.50 per ton tax imposed upon generators within the state and a \$2.00 per ton tax imposed on in-state hazardous landfills for out-of-state wastes received. *See id.* at § 44-56-170.

42. Upon such a showing, a victim may recover as much as \$500,000 or ten percent of the fund. *See* S.C. Dep't of Health & Environmental Control R., S.C. CODE ANN. (R & REG.) 61-79.5C(2)(e)(iii) (Supp. 1980).

43. Because in most jurisdictions process can be served by publication when defendants cannot be personally served, *e.g.*, S.C. CODE ANN. § 15-9-720 (1976), and such service can provide a basis for default judgment, *e.g.*, S.C. CODE ANN. § 15-35-340 (1976), litigation would seem to be required in most instances as a condition of recovery from the fund.

ble to finance an action in court may be unable to obtain compensation. Furthermore, because the fund is limited to contingencies that arise from "preexisting abandoned" sites, strict construction of this language may make the fund unavailable to victims of inactive sites whose polluters are identifiable but insolvent.

The New Jersey Spill Compensation Act⁴⁴ established a fund financed mainly by a tax on petroleum and petroleum products to compensate direct and indirect damages caused by the discharge of "hazardous substances."⁴⁵ Although this fund was apparently created primarily as a measure against oil spills, its coverage may be broad enough to include at least some hazardous waste injuries.⁴⁶ Unlike the South Carolina Fund, the New Jersey fund does not require that a plaintiff seek and enforce a judgment as a condition of recovery.

The propriety of these funds is drawn into question by a provision in the Superfund Act that may preempt maintenance of such funds by the states:

Except as provided in this Act, no person may be required to contribute to any fund, the purpose of which is to pay compensation for claims for any costs of response or damage or claims which may be compensated under this title. Nothing in this section shall preclude any State from using general revenues for such a fund, or from imposing a tax or fee upon any person or upon any substance in order to finance the purchase or prepositioning of hazardous substance response equipment or other preparations for the response to a release of hazardous substances which affects such State.⁴⁷

The prohibition of required contribution to compensatory funds might be interpreted as merely proscribing similarly financed funds that compensate for the same injuries as Superfund. This interpretation suggests a congressional desire to avoid duplication of effort rather than to secure wholesale elimination of state

44. N.J. STAT. ANN. § 58:10-23.11g, h (Supp. 1980).

45. *Id.* § 58:10-23.11a.

46. The Act defines "hazardous substances" as petroleum products and the list of hazardous substances adopted by the EPA under the Clean Water Act of 1977, 33 U.S.C. § 1251 (1977). N.J. STAT. ANN. § 58:10-23.11(b) (Supp. 1980). Because many of the waste substances regulated under R.C.R.A. are also considered hazardous under the Clean Water Act, the fund may be available to many hazardous waste victims.

47. 42 U.S.C. § 9614(c) (Supp. 1980).

funds. Therefore, because private parties are not compensated by Superfund, state funds established for that purpose may not be barred even though financed by the levy of a tax or fee upon the same industrial community that contributes to the Superfund.⁴⁸

Alternatively, "compensation for claims for *any* costs of response or damage or claims . . . under this title" might be construed as a much broader prohibition that precludes all similarly financed contingency funds regardless of their focus. The scope of the provision is presently being litigated in *New Jersey v. United States*,⁴⁹ a declaratory judgment action brought to test the validity of New Jersey's compensation fund. In any event, funds financed by means other than an industrial tax or fee, such as by general revenues or by fines, are permitted by the provision.

III. INSURANCE COVERAGE

Because environmental pollution causes widespread damage and injury and often leads to complex and costly litigation concerning the interests of multiple parties, the insurance industry has been reluctant to provide specific coverage for pollution-related damages.⁵⁰ Nevertheless, in some instances, hazardous waste victims may be afforded limited recovery under their own policies or under a policy held by the polluter. This section considers the availability of recovery for hazardous waste injuries under three types of policies: 1) a health and accident policy held by the victim, 2) a property insurance policy held by the victim, and 3) the polluter's general liability coverage.

A. Threshold Issues

As a preliminary matter, a hazardous waste victim seeking

48. States should be wary of creating funds that have some purposes which overlap with Superfund and some which do not. To ensure that the legitimate purposes are not preempted, it is advisable 1) to attach a severability clause to the provisions creating the fund specifying that the fund is to continue for its lawful purposes even if several of its purposes are found unlawful, or 2) to indicate that the fund is for purposes not covered by other funds. For an example of the latter, see S.C. CODE ANN. § 44-56-160 (Supp. 1980).

49. No. 81-0945 (D.D.C., filed Apr. 21, 1981).

50. See Hourihan, *Insurance Coverage for Environmental Damage Claims*, 15 FORUM 551, 552 (1980).

insurance recovery must overcome several barriers. First, an insurance policy must exist against which a claim can be asserted. Although many Americans carry some kind of health coverage,⁵¹ many others, particularly members of lower income groups, do not.⁵² Those persons who do not carry health insurance probably also do not have property insurance. Second, in cases in which recovery is to be predicated on a polluter's general liability coverage, it may be difficult to locate the waste disposer to determine the existence of liability coverage, particularly if the offending site is abandoned. Third, even if an insurance policy exists, the claimant must establish that the damage occurred within the policy period. Under most policies, those damages and injuries originating before⁵³ or after⁵⁴ the effective date of the policy are not covered.⁵⁵ Because the harmful effects of mismanagement of hazardous waste may not surface until years after the disposal of the materials, the occurrence of the harm during the policy period may be difficult to prove.⁵⁶ Finally, a claimant must be able to show that the type and cause of his injury are within the terms of the particular policy.

51. Pfennigstorf, *supra* note 15, at 421.

52. Because most Americans who have health insurance are covered by group health insurance programs, persons not working are less likely to own health insurance. *Id.*

53. *E.g.*, Life & Cas. Ins. Co. v. Nicholson, 246 Ark. 570, 439 S.W.2d 648 (1969); Pearce v. Union Bankers Ins. Co., 259 So. 2d 81 (La. App. 1972).

54. *E.g.*, Illinois Produce Int'l, Inc. v. Reliance Ins. Co., 388 F. Supp. 29 (N.D. Ill. 1975); Rydman v. Martinolich Shipbuilding Corp., 13 Wash. App. 150, 534 P.2d 62 (1975).

55. Hourihan, *supra* note 50, at 559.

56. With first-party coverage held by the victim, an important issue is whether the illness or property damage caused by wastes *originated* before the effective date of the policy. 43 AM. JUR. 2d *Insurance* § 1209 (1969). In determining the availability of coverage, however, a policy is normally construed favorably to the insured, and the illness or damage is deemed to have originated at the time it first manifests itself. *See, e.g.*, Coxen v. Western Empire Life Ins. Co., 168 Colo. 444, 452 P.2d 16 (1969); Mayer v. Credit Life Ins. Co., 42 Mich. App. 648, 202 N.W.2d 521 (1972).

Because liability policies generally cover only property damage and bodily injuries that occur during the policy period, *see* 3 R. LONG, *THE LAW OF LIABILITY INSURANCE* App. 59-60 (1980), a central question concerning third-party coverage is whether the damage occurred before the expiration of the policy. Because the dangers caused by inactive and abandoned hazardous waste sites often arise years after active use of the sites has ceased, an occurrence during the policy is especially difficult to establish.

B. Victims' First-Party Coverage⁵⁷

Health and accident policies, typically written on an "all risks" basis, normally provide benefits for accident, sickness, or death without regard to the cause of the injury.⁵⁸ The available benefits, however, are limited in two respects. First, because most policies put ceilings on the amount of recovery possible, a hazardous waste victim may not be compensated to the full extent of his injury.⁵⁹ Second, health and accident policies normally cover only medical and hospital expenses and do not provide compensation for nonpecuniary damages such as pain, suffering, and disfigurement; for the psychological effects of pollution such as annoyance, irritation, and anxiety; or for loss of income resulting from acute sickness or long-term disability.⁶⁰

Recovery for hazardous waste-related damages is even less likely under a property insurance policy. In contrast to the "all risks" approach found in health and accident policies, property insurance is cause oriented and protects a wide range of property interests against specifically enumerated perils such as fire, theft, and damage caused by natural forces.⁶¹ Because typical property insurance policies do not expressly insure against pollution,⁶² property damages caused by hazardous wastes usually are not covered. Furthermore, even if recovery were available under a property insurance policy, the recovery is limited by the typical policy's failure to compensate for loss of use and enjoyment of property⁶³ or reductions in property value.⁶⁴

57. From the victim's point of view, first-party coverage is preferable; not only does it directly indemnify him for his losses, as opposed to the indirect recovery provided by third-party liability policies, but it also provides the only source of compensation when no valid claim exists under common law or statute. Pfennigstorf, *supra* note 15, at 419.

58. *Id.* at 420.

59. Health and accident policies provide for the payment of limited sums for enumerated injuries. 44 AM. JUR. 2D *Insurance* § 1594 (1969). See also 1 J. APPLEMAN, *INSURANCE LAW AND PRACTICE* § 353 (1965).

60. Pfennigstorf, *supra* note 15, at 421.

61. *Id.* at 422. See also 44 AM. JUR. 2D *Insurance* §§ 1347, 1392, 1399, 1405 (1969).

62. Pfennigstorf, *supra* note 15, at 422.

63. See, e.g., *Darvie v. American Bankers Ins. Co.*, 80 So. 2d 541 (La. App. 1955); *Housner v. Baltimore-American Ins. Co.*, 205 Wis. 23, 236 N.W. 546 (1931).

64. Pfennigstorf, *supra* note 15, at 430.

C. Third-Party Liability Coverage

A standard clause of general liability insurance policies carried by businesses provides that "[t]he [insurer] will pay on behalf of the insured all sums which the insured shall become legally liable to pay as damages because of: A. Bodily injury, or, B. Property damage to which this insurance applies caused by an occurrence."⁶⁵ Current policies define an occurrence as "an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured."⁶⁶ The critical question in determining the availability of recovery for hazardous waste-related injuries under this type of policy is whether the insured business expected or intended the release of hazardous waste from the disposal site.

Generally, because an insured is held to expect the natural and foreseeable consequences of his voluntary conduct, these consequences are not covered by liability insurance.⁶⁷ Thus, in *Western Casualty & Surety Co. v. Frankfort*,⁶⁸ a case factually analogous to the hazardous waste disposal situation, the Ken-

65. 3 R. LONG, *supra* note 56, at App. 31.

66. *Id.* at App. 60. This is standard language in policies written after 1973. *Id.* Policies written before 1973 cover either bodily injury and property damage caused by "accident", see Annot., 48 A.L.R.2d 1048 n.2 (1964), or damages caused by an "occurrence," defined as "an accident, including injurious exposure to conditions, which results, during the policy period, in bodily injury or property damage neither expected nor intended from the standpoint of the insured." 3 R. LONG, *supra* note 54, at App. 59. Because neither of these provisions includes language such as "an accident including continuous or repeated exposure to conditions . . .," which is found in post-1973 policies, *id.*, the question of whether the older policies cover injuries caused by continuous or repeated exposure to hazardous conditions or only the more sudden accidents or occurrences is a source of potential controversy.

Liability policies covering damages caused "by accident" are generally held not to apply to injuries caused by continuous exposure to injurious conditions. See, e.g., *Leggett v. Home Indem. Co.*, 461 F.2d 257 (10th Cir. 1972); *Western Cas. & Sur. Co. v. Frankfort*, 516 S.W.2d 859 (Ky. 1974). But see *White v. Smith*, 440 S.W.2d 497 (Mo. Ct. App. 1969). An "occurrence" under older policies generally has been construed as a broader term than "accident," broad enough to encompass continuous or repeated exposures to hazardous conditions. See, e.g., *Tennessee Corp. v. Hartford Accident & Indem. Co.*, 463 F.2d 548 (5th Cir. 1972); *Grand River Lime Co. v. Ohio Cas. Ins. Co.*, 32 Ohio App. 2d 178, 289 N.E.2d 360 (1972).

67. 1 J. APPLEMAN, *supra* note 59, at § 4492.02.

68. 516 S.W.2d 859 (Ky. 1974). For other cases in which foreseeable environmental harm has been found not covered by general liability policies, see *Leggett v. Home Indem. Co.*, 461 F.2d 257 (10th Cir. 1972); *Clark v. London & Lancashire Indem. Co. of America*, 21 Wis. 2d 268, 124 N.W.2d 29 (1963).

tucky Court of Appeals held that when city employees operated a dump in a way that caused, as a natural and ordinary consequence, refuse to be pushed and spilled upon the land of another, the encroachment could be characterized as neither unintentional nor unforeseeable, and no recovery could be had under the city's liability insurance policy. Because damages that flow from improper disposal of hazardous waste are at least arguably foreseeable to the disposer, under the reasoning in *Frankfort*, the polluter's insurance company may be able to avoid liability.⁶⁹

Recovery under a waste disposer's liability insurance policy also may be avoided if the policy contains a "contamination exclusion" or "pollution exclusion" clause.⁷⁰ These provisions typically exclude property damages and damages for bodily injuries "arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water-course or body of water" ⁷¹ These exclusions normally do not deny coverage when discharge or release is "sudden and accidental," ⁷² but because many hazardous waste contingencies arise over a period of time rather than as a sudden event, these exclusions may nevertheless defeat claims for damages caused by hazardous waste.

Apart from these difficulties, effective liability coverage may be unavailable because injuries arising from inactive and abandoned hazardous waste sites may not surface until years after active use of the site has ceased. Thus, like first-party insurance, third-party liability coverage may fail to afford complete recovery to the victims of inactive and abandoned hazardous waste sites.⁷³ Consequently, for full relief, victims must seek redress in

69. 516 S.W.2d at 860.

70. These exclusions are standard in policies written after 1973. See 3 R. LONG, *supra* note 56, at App. 67-68.

71. *Id.* at App. 68. For cases considering pollution exclusions, see *Molton, Allen & Williams, Inc. v. St. Paul Fire & Marine Ins. Co.*, 347 So. 2d 95 (Ala. 1977); *Pepper Indus., Inc. v. Home Ins. Co.*, 67 Cal. App. 3d 1012, 134 Cal. Rptr. 904 (1977).

72. 3 R. LONG, *supra* note 56, at App. 68.

73. It should be recognized, however, that although liability policies held by persons responsible for inactive hazardous waste sites may not cover waste-related injuries, such coverage is presently available. See Pfennigstorf, *supra* note 15, at 442-44; Hourihan, *supra* note 50, at 553.

the courts.

IV. HAZARDOUS WASTE LITIGATION

Parties seeking tort recovery for injuries to person or property caused by inactive and abandoned hazardous waste sites encounter several substantial barriers. First, because inactive site problems often do not arise until well after a site's active use has ceased,⁷⁴ a plaintiff's claim may be barred by a statute of limitation. Further, because the parties primarily responsible for inactive and abandoned sites are often minimally solvent or insolvent⁷⁵ or are outside the jurisdiction of the court, it may be difficult to locate a financially responsible defendant against whom an actionable claim can be asserted. Finally, in hazardous waste litigation, it may be particularly difficult to show a direct causal relationship between the plaintiff's injury and the defendant's culpable conduct.

A. *Statutes of Limitation*

Statutes of limitation play an important role in the legal system; they bar claims that, due to the passage of time, may prove indefensible because memories have faded, witnesses have died or disappeared, and evidence has been lost.⁷⁶ Statutes in most jurisdictions provide that an action must be brought within a specified time after the cause or right of action has accrued.⁷⁷ In the usual tort case, determination of the time of accrual of a cause of action creates no difficulty because the tortious act and the resulting injury occur in close proximity. In hazardous waste

74. Recognition that subsoil migration of toxic materials has contaminated a well or that a person's health has been adversely affected by the consumption of contaminated water may not occur until years after the materials were improperly disposed of.

75. Before establishment of federal and state financial responsibility requirements, those primarily responsible for hazardous waste sites, the disposers and transporters, often were minimally solvent operations. In South Carolina, six of the state's seven worst hazardous waste sites are inactive and insolvent or abandoned. Interview with John T. Buchanan, Director of Enforcement Division of Bureau of Solid and Hazardous Waste Management, South Carolina Dep't of Health and Environmental Control, in Columbia, S.C. (Aug. 4, 1981).

76. *Order of R.R. Telegraphers v. Railway Express Agency, Inc.*, 321 U.S. 342, 348-49 (1944).

77. See S.C. CODE ANN. § 15-3-20 (1976). Other states have enacted similar statutes. See, e.g., ALA. CODE § 6-2-30 (1975); N.J. STAT. ANN. § 2A:14-1 (1970). Under these statutes, the limitation period for most tort actions is six years.

cases, however, a substantial period of time may elapse between release of waste and subsequent manifestation of injury, and precise determination of the time of accrual may therefore be difficult.

The accrual of a toxic tort action may be fixed at several different times: 1) when the tortious conduct occurred, 2) when the injury first manifested itself, or 3) when the victim first discovered or reasonably should have discovered that the injury resulted from the defendant's tortious conduct.⁷⁸ As a general rule, tort actions run from the time of the tortious conduct rather than from the point of discovery of the injury or of the defendant's culpability.⁷⁹ Under this rule, an action against a hazardous waste polluter would run from the time of improper disposal, which may have occurred many years before discovery of the harm.

When the injury is likely to go undiscovered beyond the statutory period, some courts have been reluctant to apply the general rule mechanically, finding instead that an action runs from the time the injury is discovered.⁸⁰ This "discovery" rule arose from the recognition that victims of inherently unknowable dangers should have their day in court,⁸¹ and it has been applied in cases considering latent injuries to property⁸² and persons.⁸³

Although it is more protective of plaintiffs than the strict

78. Birnbaum, *Statutes of Limitations Problems in Environmental Tort Suits*, in *Toxic Torts* 412 (P. Rheingold ed. 1977).

79. See, e.g., *Warren v. United States*, 199 F. 753 (5th Cir. 1912); *Brown v. Finger*, 240 S.C. 102, 124 S.E.2d 781 (1962).

80. See, e.g., *Gattis v. Chavez*, 413 F. Supp. 33 (D.S.C. 1976). The district court recognized the adoption of the "discovery rule" for interpreting statutes of limitation as a growing trend in the law. *Id.* at 38.

81. Note, *Medical Malpractice Statutes of Limitations: Uniform Extension of the Discovery Rule*, 55 IOWA L. REV. 486, 489 (1969).

82. See, e.g., *McCurley v. South Carolina State Highway Dep't*, 256 S.C. 332, 182 S.E.2d 299 (1971); *Conestee Mills v. Greenville*, 160 S.C. 10, 158 S.E. 113 (1931); *Sutton v. Catawba Power Co.*, 104 S.C. 405, 89 S.E. 353 (1916). In *McCurley* and *Conestee*, the court used a continuing nuisance theory to allow plaintiffs to recover for the impairment of property despite the prior running of the statute. According to these cases, a continuing cause of action accrues if injury to property is suffered because of another's negligence and the cause is abatable. If the injury occurs within the statutory period, the injured party may sue at any time injury is discovered. *Sutton* also supports application of the discovery rule in cases involving latent injuries to land.

83. See, e.g., *Urie v. Thompson*, 337 U.S. 163 (1949); *Karjala v. Johns-Manville Prods. Corp.*, 523 F.2d 155 (8th Cir. 1975).

accrual rule, the discovery rule may fail to produce an equitable result when the discovery of injury and the discovery of causal relationship do not occur simultaneously. In hazardous waste cases, a victim who has contracted a chronic illness as a result of exposure to carcinogens released from a waste disposal site may discover the release or the connection between the release and his injury long after the initial diagnosis of his illness. Considering this problem in the analogous context of long-term reaction to prescription drugs, several courts have concluded that a cause of action does not accrue "until the plaintiff discovers or in the exercise of reasonable diligence should have discovered not only that he has been injured but also that his injury may have been caused by the defendant's conduct."⁸⁴

Because of the inequity that would result from barring recovery by a waste victim who could not have learned of his injury or the defendant's culpability until after expiration of the period of limitation, application of the cause and effect discovery rule or at least the injury discovery rule seems appropriate. The reluctance of some courts to abandon the traditional accrual rule because of the policies behind enforcement of limitation periods,⁸⁵ however, renders uncertain the applicability of the more liberal approaches in hazardous waste cases.

B. Finding a Defendant

Apart from the substantial obstacles presented by statutes of limitation, a plaintiff seeking damages for injuries caused by hazardous waste must identify a financially responsible defendant against whom an action can be asserted. Although the party directly responsible for an inactive waste site—the dumper or disposer—may be ascertainable and solvent,⁸⁶ he is more

84. *Raymond v. Eli Lilly & Co.*, 117 N.H. 164, 171, 371 A.2d 170, 174 (1977).

85. See notes 76 & 79 and accompanying text *supra*.

86. Several tort theories, including trespass, negligence, nuisance and strict liability, are potentially applicable against ascertained hazardous waste dumpers and disposers. The effectiveness of these theories in inactive site cases is largely speculative because of the limited amount of litigation. Commentators generally agree that, of the four theories, trespass and negligence are least likely to succeed in hazardous waste and analogous litigation and that nuisance law and strict liability, although limited in several respects, have the greatest potential for actions of this type. Commentators also generally agree that, given the speculative applicability of these theories, some victims of inactive and abandoned sites may be without remedy even though the party directly responsible for

often unidentifiable, minimally solvent, insolvent, or has left the jurisdiction.⁸⁷ The plaintiff can therefore improve the chance of recovery by implicating the generators of the injury-producing wastes, who are more likely to be solvent. Recovery against hazardous waste generators, however, is seriously complicated by the independent contractor rule of tort law.⁸⁸

In many cases, hazardous wastes are transported and disposed of by parties independent of the waste generator and over whom the generator has little or no right of control regarding the details of the work to be done. Because these independent contractors⁸⁹ are not merely an extension of the waste generator but conduct their own enterprise and control its manner of operation, they rather than the generator will normally be liable for torts committed in performance of their work.⁹⁰ Thus, the inde-

their harm has been ascertained. For more complete discussion of the merits and deficiencies of these tort causes of action in environmental and hazardous waste litigation, see COMPTROLLER GENERAL, U.S. GENERAL ACCOUNTING OFFICE, *HAZARDOUS WASTE SITES POSE INVESTIGATION, EVALUATION, SCIENTIFIC, AND LEGAL PROBLEMS* (1980); Baurer, *Love Canal: Common Law Approaches to a Modern Tragedy*, 11 ENV'T'L L. 133 (1980); Milhollin, *Long-Term Liability for Environmental Harm*, 41 U. PITT. L. REV. 1 (1979); Pfennigstorf, *supra* note 15, at 347; Note, *Strict Liability for Generators, Transporters, and Disposers of Hazardous Wastes*, 64 MINN. L. REV. 949 (1980); Note, *Inactive or Abandoned Hazardous Waste Disposal Sites: Coping With a Costly Past*, 53 S. CAL. L. REV. 1709 (1980).

87. Some inactive hazardous waste sites are nothing more than lots that were leased for toxic storage or disposal from landowners who were unaware of the full consequences; others are the result of surreptitious dumping without the landowner's knowledge or permission. Interview with John T. Buchanan, *supra* note 75.

88. In some instances, the person responsible for dumping or disposing of hazardous waste is an employee of the generator of the material. For example, employees of PCA Industries, a North Carolina photograph developing company, were recently discovered to have dumped chemical wastes at a remote farm near Pageland, South Carolina. *Charlotte Observer*, July 11, 1981, at 1A, col. 1. Because the generator normally has complete control over the details of the work performed by his employees, he is usually liable for their tortious acts under the doctrine of *respondeat superior*. 2 F. HARPER & F. JAMES, *THE LAW OF TORTS* § 26.6 (1956); W. PROSSER, *HANDBOOK OF THE LAW OF TORTS* § 70 (4th ed. 1971). Employer liability under this doctrine requires that the tortious act occur while the employee-servant is operating within the scope of his employment. Establishing generator liability thus presents no particular problems when the dumper or disposer is an employee of the generator. Establishing the employee-disposer's tort is a prerequisite to establishing the master's liability. As was indicated earlier, however, this in itself may be difficult. See note 86 *supra*.

89. An independent contractor is "a person who contracts with another to do something for him but who is not controlled by the other nor subject to the other's right to control with respect to his physical conduct in the performance of the undertaking." RESTATEMENT (SECOND) OF AGENCY § 2(3) (1958).

90. The independent contractor rule is commonly justified by observation that inde-

pendent contractor rule, in effect, shields generator-employers from liability for torts committed in performance of the work.

Several considerations militate against invocation of the independent contractor rule in cases concerning inactive and abandoned hazardous waste sites. First, contrary to the rule's view of the contractor and the employer as equally capable of avoiding risks and *bearing the costs arising from those risks*,⁹¹ the disposal operator is in fact less likely than the generator to be able to do so; applicability of the rule is, therefore, questionable in the hazardous waste context. Furthermore, despite the intervention of an independent disposer, the enterprise of the contracted service remains the generator's—he is the primary party benefited by disposal of his waste.⁹² Finally, because the generator is in the better position to bear and distribute loss and to control the factors producing loss, it is more appropriate that he, rather than the innocent victims, bear the loss.⁹³

As it stands, the independent contractor rule presents a formidable barrier to recovery in suits against hazardous waste generators. Numerous exceptions to the rule have developed,⁹⁴ however, several of which may be available to victims of waste-related injuries.

1. Inherently Dangerous Activities.—The “inherently dangerous activity” exception, first carved out in *Bower v. Peate*⁹⁵ and since adopted in most American jurisdictions,⁹⁶ holds an employer liable for injuries negligently caused by the independent contractor when the work performed by the independent contractor is inherently dangerous, regardless of how skillfully

pendent contractors are likely to be able to satisfy tort judgments; that since the contractor and not the employer has control over the work, he is in a superior position to prevent injuries; and that a contractor is able to include the costs of preventive measures, insurance premiums, and tort judgments in his business costs and pass them on to his customers. 51 U. COLO. L. REV. 275, 277-78 (1980).

91. Douglas, *Vicarious Liability and the Administration of Risk*, 38 YALE L.J. 584, 599 (1929).

92. 31 VAND. L. REV. 414, 416 (1978).

93. *Majestic Realty Ass'n v. Toti Contracting Co.*, 30 N.J. 425, 432-33, 153 A.2d 321, 324-25 (1959).

94. The *Restatement (Second) of Torts* lists twenty-four exceptions to the rule. RESTATEMENT (SECOND) OF TORTS §§ 410-29 (1965).

95. 1 Q.B.D. 321 (1876).

96. For a listing of these jurisdictions, see Morris, *Torts of an Independent Contractor*, 29 ILL. L. REV. 339, 349 (1934).

the work is done.⁹⁷ This exception is based on the view that when work involves an unusual danger to third persons, a party should not be able to escape liability merely by hiring an independent contractor to do the work.⁹⁸

Hazardous waste disposal should qualify as an inherently dangerous activity. Several commentators have noted that waste disposal is dangerous to the extent that no precautions can render it completely safe.⁹⁹ Furthermore, the development of funds¹⁰⁰ and financial responsibility requirements¹⁰¹ to assure the availability of resources to clean up releases from properly operated and permitted disposal facilities reflects a recognition by legislative and regulatory bodies that even state of the art disposal practices present hazards.

When forced to distinguish between inherently dangerous activities and merely dangerous activities, however, courts have reached inconsistent results. For example, while work with highly flammable substances¹⁰² and coal mining¹⁰³ have been deemed not inherently dangerous, activities such as highway construction¹⁰⁴ and painting above a sidewalk¹⁰⁵ have been considered inherently dangerous.

The exception's applicability to hazardous waste contingen-

97. The difficulty inherent in establishing the negligence of the disposal contractor in hazardous waste litigation limits at the outset the availability of this exception. See note 86 *supra*. Another exception to the independent contractor rule, the "ultrahazardous activities" exception, which in effect imposes strict liability upon employers, holds the employer liable for injuries that arise out of ultrahazardous work performed by a contractor regardless of whether the injuries are associated with a negligent act. "Ultrahazardous" contemplates a greater degree of risk than "inherently dangerous," but the distinction is slight. 51 U. COLO. L. REV. at 280. In any event, unless courts are willing to classify hazardous waste activities as at least "inherently dangerous," the prospects of an "ultrahazardous" designation are slim. The creation of Superfund, however, suggests congressional recognition of the ultrahazardous nature of hazardous waste disposal. See note 31 *supra*.

98. See, e.g., *Montgomery v. Gulf Refining Co.*, 168 La. 73, 121 So. 578 (1929); *Bower v. Peate*, 1 Q.B.D. 321 (1876).

99. See, e.g., Note, *Strict Liability for Generators*, *supra* note 85, at 974-77; 126 CONG. REC. H9462 (daily ed. Sept. 23, 1980) (remarks of Rep. Gore).

100. See notes 27-41 and accompanying text *supra*.

101. See notes 21-26 and accompanying text *supra*.

102. *Jennings v. Vincent's Adm'x*, 284 Ky. 614, 145 S.W.2d 537 (1940).

103. *Courtney v. Island Creek Coal Co.*, 474 F.2d 468 (6th Cir. 1973).

104. *Schwartz v. Merola Bros. Constr. Corp.*, 290 N.Y. 145, 48 N.E.2d 299 (1943).

105. *Rohlf v. Weil*, 271 N.Y. 444, 3 N.E.2d 588 (1936); *contra*, *Press v. Penny*, 242 Mo. 98, 145 S.W. 458 (1912).

cies has been considered and rejected by at least one court. In *Ewell v. Petro Processors of Louisiana, Inc.*,¹⁰⁶ plaintiffs brought an action against a hazardous waste disposal facility and nine of its corporate customers for property damages and mental anguish caused by release of toxic materials from the disposal site. The contractor disposing of the waste was held liable for negligently permitting the release, but liability was not extended to the generators. The court followed the rule that a party cannot avoid liability by hiring an independent contractor to perform inherently dangerous work, but stipulated that

[w]here an available safe method, which includes the taking of adequate precautions, will render [the activity] at least ordinarily safe, and the work is done in an unsafe manner, the employer will be liable if he has expressly or impliedly authorized the particular manner which will render the work unsafe, and not otherwise.¹⁰⁷

The court concluded that waste disposal activities, if properly undertaken, can be safe and that hazardous waste disposal is accordingly not an inherently dangerous activity unless the generator authorizes a practice that renders the work unsafe.¹⁰⁸ Because the generators in *Ewell* had no apparent knowledge that part of the disposal site was improperly constructed and, therefore, could not have authorized the deleterious condition, the continued dumping of their wastes at the site was held not to be an inherently dangerous activity.¹⁰⁹

The requirement in *Ewell* of a showing of knowledge of a defective condition at the site as a requisite for generator liability presents a substantial barrier for hazardous waste plaintiffs.¹¹⁰ This particular dimension of the inherently dangerous exception, however, has apparently not been followed in any jurisdiction other than Louisiana, the only civil-law state. Its significance, therefore, is doubtful. The court's determination that hazardous waste disposal can be safely undertaken and is there-

106. 364 So.2d 604 (La. App. 1978).

107. *Id.* at 606-07.

108. *Id.* at 607.

109. *Id.* at 606-07.

110. Because structural defects at disposal sites are commonly latent in nature, the disposer may be unaware of a leak until years after its occurrence. Even when discovered, its presence is unlikely to be communicated to generator-customers.

fore not inherently dangerous is nevertheless troublesome. Taken with the general inconsistency of applications of the exception in other jurisdictions, this determination renders uncertain the availability of the exception for inherently dangerous activities as a means of circumventing the independent contractor rule in hazardous waste litigation.¹¹¹

2. *Incompetent Contractors*.—A second means by which a plaintiff might avoid the independent contractor rule is the “incompetent contractor” exception. Although this exception has appeal for hazardous waste cases, its application may be problematic. Generally stated, the “incompetent contractor” rule holds that when a foreseeable risk of injury to others exists, unless an employer takes reasonable precautions, he has a duty “to exercise reasonable care to select a competent, experienced, and careful contractor with the proper equipment, and to provide, in the contract or otherwise, for such precautions as reasonably appear to be called for.”¹¹² If the employer fails to exercise reasonable care and a third party is subsequently injured because of the contractor’s negligence, the employer is liable for having negligently selected an incompetent contractor.¹¹³ The effectiveness of this exception in a given case depends on (1) whether risk of injury was foreseeable to the employer, (2) whether the contractor was in fact incompetent, (3) whether the employer exercised reasonable care in selecting the contractor, and (4) whether the employer took adequate precautions in contracting for the performance of the work.

Because the hazardous characteristics and potential effects of many chemicals used in manufacturing processes have been

111. In contrast to the restrictive interpretation of the inherently dangerous exception in *Ewell*, the application of the exception in a recent Colorado case offers hope for hazardous waste victims. In *Western Stock Center, Inc. v. Sevit, Inc.*, 578 P.2d 1045 (Colo. 1978), the Colorado Supreme Court concluded that to be inherently dangerous, an activity need not be extremely dangerous but must present only a foreseeable and significant risk of harm to others if not properly carried out. Whether courts in other jurisdictions will follow the restrictive lead of *Ewell* or the broader approach of *Sevit* in future hazardous waste litigation remains to be seen.

112. W. PROSSER, *supra* note 88, § 71, at 469.

113. Though called an exception, the incompetent contractor approach actually establishes direct negligence of the employer. This “exception” is very similar to the doctrine of negligent entrustment, which states that a person who supplies an instrumentality to another “knowing that it will likely be used in a dangerous fashion is subject to liability for injuries proximately caused thereby.” *Lanterman v. Wilson*, 277 Md. 364, 370, 354 A.2d 432, 435 (1976).

recognized for some time¹¹⁴ and because safety precautions taken at laboratory and manufacturing levels typically have reflected cognizance of the potential hazards of chemicals,¹¹⁵ the foreseeability of harm to third parties in the event of mismanagement of chemical wastes should not be difficult to prove. Similarly, because hazardous waste disposal operations were, until recently, often technically unsophisticated and financially irresponsible businesses,¹¹⁶ establishing a contractor's incompetence might not be burdensome.¹¹⁷

Whether reasonable care was taken in selecting a contractor is a more difficult question. Courts generally agree that if an employer had actual knowledge of the contractor's incompetence at the time of the contract, liability follows as a matter of course.¹¹⁸ Some courts have reached the same conclusion when the contractor's reputation was sufficiently bad to put the employer on constructive notice of his incompetence.¹¹⁹ When the contractor's incompetence is less apparent, however, there is little agreement on what constitutes reasonableness in selection. Although a few courts have held that, in some instances, an employer has an affirmative duty of inquiry regarding the contractor's competence¹²⁰ or the condition of the contractor's equipment,¹²¹ the majority have found the selection reasonable if the contractor is reputed to be experienced in the work required of him¹²² or if the contractor merely represents himself as

114. See Baurer, *supra* note 86, at 143 (citing H. STRAUSS, HANDBOOK FOR CHEMICAL TECHNICIANS § 10-6 (1976)).

115. *Id.* A possible argument against this is that because the migratory effects of chemicals in soil have become fully understood only within the last decade, the consequences of improper disposal were neither fully foreseeable nor fully appreciated at the time of disposal. Interview with Jim Ferguson, Geologist, South Carolina Dep't of Health and Environmental Control, in Columbia, S.C. (Aug. 4, 1981).

116. See note 6 *supra*.

117. Several recent cases have suggested that financial irresponsibility alone constitutes incompetency in a contractor. See *Becker v. Interstate Properties*, 569 F.2d 1203 (3d Cir. 1977); *Majestic Realty Ass'n v. Toti Contracting Co.*, 30 N.J. 425, 153 A.2d 321 (1959).

118. *E.g.*, *Huntt v. McNamee*, 141 F. 293 (4th Cir. 1905); *Ozan Lumber Co. v. McNeely*, 214 Ark. 657, 217 S.W.2d 341 (1949).

119. *E.g.*, *Skelton v. Fekete*, 120 Cal. App. 2d 401, 261 P.2d 339 (1953).

120. *E.g.*, *Lewis v. Columbus Hosp.*, 1 A.D.2d 444, 151 N.Y.S.2d 391 (1956).

121. *E.g.*, *Kuhn v. P.J. Carlin Constr. Co.*, 154 Misc. 892, 278 N.Y.S. 635 (Sup. Ct. 1935).

122. *E.g.*, *Carr v. Stevens*, 295 F. 701 (D.C. Md. 1924).

experienced and competent in his field.¹²³ Thus, unless a hazardous waste generator had reason to know of a disposal contractor's incompetence at the time of the contract, negligent selection may be difficult to establish.¹²⁴

A plaintiff may also have difficulty showing that a generator failed to take adequate precautions. Generally if a party is aware of risks inherent in the performance of the work to be contracted, he has a duty to include precautionary provisions in his agreement with the contractor. The cases suggest that at a minimum, an employer must advise the contractor of any peculiar risks in the work.¹²⁵ Some courts have further held that the employer must expressly impose upon the contractor a duty to exercise reasonable care in the performance of the work.¹²⁶ Because hazardous waste generators possess a special knowledge of the risks presented by their waste,¹²⁷ they should be expected to exercise these precautions in contracting and should be held liable for failure to do so. Notably, although a breach of this duty by a generator may be evident in some hazardous waste cases, in other cases the improper disposal of wastes may be attributable not to the generator's failure to take adequate precautions but to a profiteering contractor's disposal of the wastes in a manner inconsistent with his contractual obligations.¹²⁸

3. By-Products Liability.—A third possible means of avoiding the independent contractor rule is a "by-products liability" theory that would hold generators directly and strictly liable for

123. *E.g.*, *Claussen v. Hanschke*, 93 S.W.2d 239 (Tex. Civ. App. 1936).

124. Generally, the question of the employer's negligent selection will be resolved by the trier of fact. *Mooney v. Stainless, Inc.*, 338 F.2d 127, 136 (6th Cir. 1964). Consequently, a jury might be inclined to find the generator negligent rather than allow the innocent victim to go without remedy.

125. *E.g.*, *Mountain States Tel. & Tel. Co. v. Kelton*, 79 Ariz. 126, 285 P.2d 168 (1955); *State Highway and Public Works Comm'n v. Diamond Steamship Transp. Corp.*, 266 N.C. 371, 38 S.E.2d 214 (1946). It should be noted that the determination of the reasonableness of the generator's selection is ultimately a jury question, which in hazardous waste litigation probably inures to the benefit of the innocent victim-plaintiff.

126. *E.g.*, *Koopman v. Mansolf*, 51 Mont. 48, 149 P. 491 (1915).

127. See notes 114-115 and accompanying text *supra*.

128. For example, *Chem-Dyne Corporation*, an Ohio concern, allegedly arranged with generators to dispose of its wastes at a secure hazardous waste disposal site, calculated the cost of proper disposal in its fee, and then reaped a large profit by dumping the wastes indiscriminately and in derogation of its contractual obligations. *Winston-Salem Sentinel*, Jul. 24, 1980, at 1, col. 4.

harms caused by unreasonably dangerous wastes.¹²⁹ Because strict products liability generally is a statutory rather than a common-law remedy,¹³⁰ a cause of action in by-products liability probably requires either legislative endorsement or judicial expansion of products liability theory to include the by-products of manufacturing processes that produce goods for sale.

Strict products liability applies to "[o]ne who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property . . . for physical harm thereby caused to the ultimate user or consumer, or to his property. . . ."¹³¹ Policies underlying the law of products liability are clearly applicable to hazardous waste-related injuries: (1) costs of injury that might overwhelm individual victims are passed to the manufacturers who can spread the loss to customers through higher prices, and (2) primary responsibility for harm is fixed on the party who introduced the risk into the marketplace.¹³²

To be applicable to hazardous waste cases, however, products liability theory requires substantial expansion. Not only must the definition of "products sale" be interpreted broadly to include by-products or wastes generated in the manufacture of goods for sale, but "user and consumer" must be construed to include waste victims who do not literally use or consume wastes.¹³³ Further, a major shift in emphasis away from the injurious product itself to the entire manufacturing process is required.¹³⁴ Finally, because hazardous waste contingencies often injure a large number of persons,¹³⁵ the potential scope of generator liability might exceed that contemplated by products liability.

129. See Note, *Strict Liability for Generators*, *supra* note 86, at 977-85, for a more complete discussion of this theory.

130. For example, in *Hatfield v. Atlas Enterprises, Inc.*, 274 S.C. 247, 262 S.E.2d 900 (1980), the South Carolina Supreme Court held that prior to 1974, the year the South Carolina Legislature codified section 402A of the *Restatement (Second) of Torts*, strict products liability did not exist as a common-law remedy in the state. *Id.* at 248, 262 S.E.2d at 901.

131. RESTATEMENT (SECOND) OF TORTS § 402A(1) (1965).

132. See *Escola v. Coca Cola Bottling Co.*, 24 Cal. 2d 453, 462, 150 P.2d 436, 441 (1944) (Traynor, J., concurring).

133. Note, *Strict Liability for Generators*, *supra* note 86, at 979-81. In many jurisdictions, however, "user and consumer" has been liberally interpreted to include innocent bystanders. Thus, inclusion of hazardous waste victims in this class may not do great violence to the rule. *Id.* at 981.

134. *Id.* at 980.

135. See the discussion of the Love Canal incident at note 11 *supra*.

ity statutes. Given the extent of expansion necessary to make products liability theory applicable to hazardous waste cases, by-products liability may not be a practicable basis for generator liability.

C. Causation

Assuming that a hazardous waste plaintiff is able to avoid statute of limitation problems and can make a case against the generators of the injury-producing wastes under one of the above-mentioned theories, he still must establish causation. In the context of hazardous waste litigation, the causation requirement comprises two separate elements: (1) the plaintiff must establish that his injury was, in fact, caused by exposure to hazardous wastes, and (2) he must show that the defendant was the source of the pollution that caused his injury.

The first element is a problem when no proof exists that the released waste is capable of causing in humans the particular harm suffered by the plaintiff and when the plaintiff's injury may be equally attributable to other sources, such as workplace hazards, air pollution, diet, or genetic history. Causation in this context is a factual determination made by the jury and is commonly based on expert and statistical proof.¹³⁶

The second element that a plaintiff must prove—that the generator-defendant is the source of his injury—may be particularly difficult in cases concerning inactive and abandoned hazardous waste sites. The plaintiff may find himself in one of four fact patterns: 1) the wastes that caused the injury were produced by a single, identifiable generator; 2) an identified group of generators produced the waste, one or more of whom may be responsible for the plaintiff's injury; 3) some of the generators who produced the waste can be identified but others cannot; or 4) the site is abandoned and none of the waste's generators can be identified.¹³⁷

The first situation is, of course, the simplest and most amenable to traditional tort analysis because only one possible de-

136. Rice, *Pollution as a Nuisance: Problems, Prospects, and Proposals*, in *Toxic Torts* 342, 355 (P. Rheingold ed. 1977). Superfund's provisions regarding epidemiologic studies, health effect studies, and diagnostic studies reflect a desire on the part of Congress to ease the substantial burden of showing causation. See note 32 *supra*.

137. Many variations of these basic patterns are possible.

fendant exists. In the remaining fact patterns, a victim of hazardous waste may in many cases be unable to identify the generator directly responsible for his loss: many inactive and abandoned waste sites contain wastes from multiple generators, and some wastes produce injury while others do not.

In these circumstances, the traditional legal requirement that a plaintiff prove his case against each individual defendant by a fair preponderance of the evidence¹³⁸ is far more burdensome than in the first fact pattern. When all possible defendants are identified, however, as in the second fact pattern, and when it is clear that each defendant may have contributed to or caused the plaintiff's injury, many courts have found defendants jointly and severally liable for the plaintiff's injury¹³⁹ because of the manifest unfairness of "putting on the injured party the impossible burden of proving the specific shares of harm done by each."¹⁴⁰ In several environmental cases¹⁴¹ analogous to hazardous waste situations, courts have justified joint and several liability as follows:

[w]here the tortious acts of two or more wrongdoers join to produce an indivisible injury, that is, an injury which from its nature cannot be apportioned with reasonable certainty to the individual wrongdoers, all of the wrongdoers will be held jointly and severally liable for the entire damages and the injured party may proceed to judgment against any one separately or against all in one suit.¹⁴²

The named defendant or defendants against whom full judgment is entered are then entitled, under the theory of contribution, to recover from each guilty party that part of the damages for which each is responsible.¹⁴³ Joint and several liability thus

138. Harley, *Proof of Causation in Environmental Litigation*, in *Toxic Torts* 406, 406 (P. Rehgold ed. 1977).

139. *E.g.*, *Ybarra v. Spangard*, 25 Cal. 2d 486, 154 P.2d 687 (1944) (because plaintiff was injured while under anesthesia and could not identify the tortfeasor, all hospital staff in the room at the time were found jointly liable).

140. *Maddux v. Donaldson*, 362 Mich. 425, 430, 108 N.W.2d 33, 36 (1961) (citing *Wigmore, Joint-Tortfeasors and Severance of Damages: Making the Innocent Party Suffer without Redress*, 17 ILL. L. REV. 458, 459 (1923)).

141. *E.g.*, *Michie v. Great Lakes Steel Div.*, 495 F.2d 213 (6th Cir. 1974); *Phillips Petroleum Co. v. Hardee*, 189 F.2d 205 (5th Cir. 1951).

142. *Landers v. East Tex. Salt Water Disposal Co.*, 151 Tex. 251, 256, 248 S.W.2d 731, 734 (1952).

143. 126 CONG. REC. H9463 (daily ed. Sept. 23, 1980) (remarks of Rep. Gore).

shifts the burden of apportioning loss from the innocent plaintiff to the culpable defendants. Because of the impracticality in many cases of apportioning fault for hazardous waste-related injuries,¹⁴⁴ joint and several liability may be available when all of the generators that could be responsible for the harm are known.

Circumstances in which several generators, but not all, are identifiable—as in the third fact pattern—present a more difficult case for application of joint and several liability. When the majority of the generators who have contributed to a problem are ascertainable, the imposition of joint and several liability may produce little more hardship than its application when all sources are identified: courts can apportion the damages, including that portion attributable to unascertained generators, among the identified majority of generators. When only a few of many hazardous waste generators can be identified, however, application of joint and several liability may produce an unwarranted result. Because the costs associated with problem hazardous waste sites can be enormous and because identified generators may themselves experience difficulty locating other responsible parties with whom the loss can be shared, joint and several liability may force upon a few defendants the responsibility for a huge loss to which they contributed only minimally—a burden that may be sufficient to drive them out of business. Perhaps for this reason, cases to date have imposed joint and several liability only in circumstances in which all possible defendants are identifiable.

If application of joint and several liability is questionable in cases in which fewer than all waste generators can be identified, its application in situations similar to the fourth fact pattern—when the disposal site is abandoned and no generators can be identified—would appear to be totally unsuitable. Nevertheless the California Supreme Court's application of joint liability in the recent case of *Sindell v. Abbott Laboratories*¹⁴⁵ suggests a ground for relief for hazardous waste victims in such a situation.

In *Sindell*, a products liability action, plaintiff brought suit against eleven drug companies on behalf of a class of women who had been injured as a result of their mothers' ingesting a latently carcinogenic drug during pregnancy. Although the

144. *Id.* at H9464.

145. 26 Cal. 3d 588, 607 P.2d 924, 163 Cal. Rptr. 132 (1980).

plaintiff was unable to identify the manufacturer of the precise product her mother had consumed years before, the court, recognizing the general rule that "the imposition of liability depends upon a showing by the plaintiff that his or her injuries were caused by the act of the defendant or by an instrumentality under the defendant's control,"¹⁴⁶ noted that the defendants were better able to bear the cost of the injuries and were in the better position to prevent defects and to warn of harmful effects. The court then concluded that "as between an innocent plaintiff and negligent defendants, the latter should bear the cost of the injury."¹⁴⁷ The court stated that, because the plaintiff named in the action "the manufacturers of a substantial share of the . . . [drug] her mother might have taken," each defendant would be "held liable for the proportion of the judgment represented by its share of that market unless it demonstrates that it could not have made the product which caused plaintiff's injuries."¹⁴⁸

The "market-share" joint liability approach used in *Sindell*, which represents a modification of the "alternative liability" theory exemplified by the noted case of *Summers v. Tice*,¹⁴⁹ has obvious appeal for the victims of abandoned hazardous waste sites when a large number of possible tortfeasors exists, any of whom may have produced the injury-causing substance. Thus, a victim of an abandoned site might be entitled to recover under an analogous "waste-share" theory if he can isolate the chemical(s) responsible for his injury and can name in an action the generators who, at the time of disposal activities at the problem disposal site, produced a substantial share of waste containing the injurious chemical(s). Each generator might then be held lia-

146. *Id.* at 597, 607 P.2d at 928, 163 Cal. Rptr. at 136.

147. *Id.* at 610-11, 607 P.2d at 936, 163 Cal. Rptr. at 144.

148. *Id.* at 612, 607 P.2d at 937, 163 Cal. Rptr. at 145.

149. 33 Cal. 2d 80, 199 P.2d 1 (1948) (plaintiff was injured when two hunters shot in his direction but it could not be determined which hunter fired the shot that caused the injury). The alternative liability theory has been stated as follows:

Where the conduct of two or more actors is tortious, and it is proved that harm has been caused to the plaintiff by only one of them, but there is uncertainty as to which one has caused it, the burden is upon each such actor to prove that he has not caused the harm.

RESTATEMENT (SECOND) OF TORTS § 433B(3) (1965). The court in *Sindell* rejected strict application of the alternative liability theory because not all of the possible defendants were before the court. 26 Cal. 3d at 602, 607 P.2d at 931, 163 Cal. Rptr. at 139. A second theory rejected by the court is the "enterprise liability" theory. *Id.* at 609, 607 P.2d at 935, 163 Cal. Rptr. at 143.

ble for the proportion of the judgment that reflects his share of the production of the chemical waste at the time the site was operating, absent proof that he could not be responsible for the waste.

Application of the waste-share approach in hazardous waste litigation is nevertheless more complex than in *Sindell*. The requirement that the plaintiff name in the suit those parties producing a substantial share of the injurious substance poses unique problems in suits concerning abandoned waste sites, because identification of those generators who produced the injurious chemicals at the time the disposal site was in operation may be difficult. Furthermore, while in *Sindell* the production of the eleven named defendants constituted as much as 90% of the total amount of the drug marketed, the huge number of hazardous waste generators might necessitate the joining of hundreds of defendants in order to meet the "substantial share" requirement.¹⁵⁰

The *Sindell* market-share theory has been either impliedly or expressly rejected in several jurisdictions.¹⁵¹ One of the most recent cases to reject the theory is *Ryan v. Eli Lilly & Co.*,¹⁵² in which the United States District Court for the District of South Carolina, considering facts nearly identical to those in *Sindell*,¹⁵³ granted defendants' motion for summary judgment and noted that, although the plaintiff failed to make a case for application of the market-share theory, that theory "represents a rejection of 'over 100 years of tort law which required that before tort liability was imposed a "matching" of defendant's conduct and plaintiff's injury was absolutely essential.'"¹⁵⁴ The court concluded that a plaintiff "has not only the burden of proving negligence but also the burden of proving that the injury or damage was caused by the actionable conduct of the particular

150. See note 5 and accompanying text *supra*.

151. See *Gray v. United States*, 445 F. Supp. 337 (S.D. Tex. 1978); *Namm v. Charles Frost & Co.*, 178 N.J. Super. 19, 427 A.2d 1121 (1981); *Lyons v. Premo Pharmaceutical Labs, Inc.*, 170 N.J. Super. 183, 406 A.2d 185, *cert. denied*, 82 N.J. 291, 412 A.2d 774 (1979).

152. 514 F. Supp. 1004 (D.S.C. 1981).

153. Plaintiff, like the plaintiff in *Sindell*, was a victim of DES ingested by her mother during pregnancy. *Id.* at 1006.

154. *Id.* at 1018 (quoting *Sindell*, 26 Cal. 3d at 616, 607 P.2d at 939, 163 Cal. Rptr. at 147).

defendant."¹⁵⁵

In sum, the rejection of the market-share theory in some jurisdictions and the practical problems that are associated with its application in cases concerning abandoned hazardous waste sites render uncertain its utility in hazardous waste litigation.

V. CONCLUSION

Several vehicles exist by which the problem of third-party compensation for waste-related injuries might be resolved. The creation of a state or federal statutory cause of action, similar to those currently in effect in Oregon and Alaska,¹⁵⁶ that inures to the benefit of hazardous waste victims is one possible approach. To be effective, however, the cause of action should avoid the difficulties inherent in litigating injuries caused by inactive and abandoned sites. An effective cause of action should provide a reasonable statute of limitation;¹⁵⁷ it should sound in strict liability and be made actionable against both disposal contractors and generators; and it should diminish the plaintiff's burden of proving that a causal relation exists between the plaintiff's injury and the pollution¹⁵⁸ and that the defendant was the source of the plaintiff's injury.

155. *Id.* at 1018.

156. See notes 36-40 and accompanying text *supra*.

157. The limitation period should run from the date the injury or the causal connection between the injury and the pollutant is discovered, rather than from an earlier date. A statute of limitation was recently proposed in New York that would have the desired effect. It requires that an action be brought "within three years from the date of [the] injury, or . . . within two years from the earlier of either date of the discovery . . . or from the date of discovery of fact which would reasonably lead to such discovery." *NEW YORK ENVIRONMENTAL NEWS*, Apr. 30, 1981, at 5 (quoting New York bill A.2572).

158. The causation requirement might be ameliorated as follows:

Notwithstanding the ordinary requirements for proof of cause in fact or proximate cause of damage, injury, or loss, a discharge, release or disposal shall be presumed to have caused the injury or disease complained of and the associated medical expenses if a plaintiff seeking damages under this subsection offers evidence tending to establish a reasonable likelihood that (i) the injured or diseased party was exposed to a hazardous substance found in a discharge, release, or disposal for which the defendant may be held liable under this section, and (ii) such a hazardous substance of such a discharge, release or disposal could have caused the injury or disease of the class or type for which medical expenses are sought.

Anderson, *Superfund Proposed to Clean Up Hazardous Waste Disasters*, 20 NAT. RESOURCE J. 615, 622 (1980) (quoting S. 1480, 96th Cong., 2d Sess., 125 CONG. REC. S9179, § 4(c)(2)(A) (daily ed. July 11, 1979)).

Altering the requirement that the plaintiff prove that each defendant was a source of the injury may be difficult. The imposition of joint and several liability is one solution to the problem from the plaintiff's standpoint; yet in some instances, this imposition may work an injustice from the generator's perspective. A suggested solution to this apparent conflict is to hold generators jointly and severally liable but limit the extent of their individual liabilities. Emergency appropriations from tax revenues might be used to cover any losses in excess of the statutory ceiling.¹⁵⁹ This approach might ease the plaintiff's burden without unnecessarily forcing generators out of business. This approach, however, would shift part of the burden of paying the costs of hazardous waste pollution from those who have benefited from the injurious activity to the tax-paying public, perhaps an unwarranted result.

This economic distortion and the possibility that even a carefully drafted cause of action may fail to provide relief for abandoned site victims¹⁶⁰ make an administrative compensation fund, similar to those in South Carolina and New Jersey,¹⁶¹ attractive as an alternative means of assuring third-party recovery for hazardous waste injuries. Because state funds of this type serve a purpose not contemplated by Superfund, they might not be preempted, even though financed by taxes or fees levied against chemical and waste management industries. Alternatively, the Superfund legislation could be amended to provide for third-party relief, or a separate federal fund could be established for this purpose.

A third-party compensation fund with relaxed causation

159. The Price-Anderson Act, Pub. L. 85-256, 71 Stat. 576 (1957) (codified at 42 U.S.C. § 2210 (1976)), is designed in part to assure the availability of compensation for third-party victims in the event of a nuclear accident. Lowenstein, *The Price-Anderson Act: An Imaginative Approach to Public Liability Concerns*, 12 FORUM 594, 597 (1976-77), is instructive regarding this approach. The Act establishes a liability ceiling of \$60 million for nuclear power generators and provides that the Nuclear Regulatory Commission will provide additional indemnity up to \$500 million.

160. When a site has been abandoned, the disposal contractor is unavailable for questioning regarding the generators with whom he transacted business. Thus, unless the market-share theory of *Sindell* is applied, which, as indicated before, may be unwieldy in the hazardous waste area, there will probably be no defendants against whom a claim can be asserted. See notes 144-49 and accompanying text *supra*.

161. See notes 41-46 and accompanying text *supra*.

standards¹⁶² may be made readily available to all legitimately injured hazardous waste victims. Compensatory expenditures from such a fund can be made recoverable from identifiable parties connected with problem sites, and, in the event that no party can be identified with a site, the fund itself could absorb the loss. Because a compensation fund can be financed by and recouped from the chemical industry, the economic burden of problem sites appropriately falls on that segment of society that has reaped the benefits of past neglect, the chemical industry and its consumers.

As discussed above, several of the proposed Superfund packages considered by Congress provided this kind of administrative relief for private parties, but the level at which the fund would have to be maintained in order to compensate private parties persuaded Congress to abandon the prospect.¹⁶³ This objection might be overcome by limiting the amount recoverable from the fund, as exemplified by the South Carolina Hazardous Waste Fund,¹⁶⁴ which limits recovery to \$500,000 per claimant.¹⁶⁵ Notably, recipients of fund proceeds apparently do not sacrifice their right to pursue further private actions in the event that the fund fails to provide full recovery.¹⁶⁶

Viable approaches appear to exist by which state legislatures or Congress can resolve the problem of compensating third-party victims of inactive and abandoned hazardous waste sites. It seems manifestly unjust that innocent victims should suffer without remedy, bearing individually the huge costs of hazardous waste pollution, when mechanisms exist whereby these costs can be shifted to the sector of society that benefited from the injurious activity. Hazardous waste legislation that is more protective of third-party victims of inactive and abandoned waste sites is needed.

Colin Scott Cole Fulton

162. See note 157 *supra*.

163. See notes 33 & 34 and accompanying text *supra*.

164. S.C. CODE ANN. §§ 44-56-160 to -190 (Supp. 1980).

165. S.C. Dep't of Health & Env'tl Control R., S.C. CODE ANN. (R. & REG.) 61-79.5 C.(2)(e) (Supp. 1980).

166. *Id.*