

Northern Kentucky Law Review

Volume 11/Number 2/1984

ARTICLES

- Judicial Review of Deregulation*
Judge Harry T. Edwards 229
- Kentucky Bank Directors Liability*
P. Michael Davis and Rodney G. Alsup 285
- The Involuntary Action Defense to a Criminal Indictment*
Robert C. Hauhart 321
- An American Lawyer's View of English Legal Education*
Kevin M. Teeven 355

COMMENTS

- Foregone But Not Forgotten: Interest Free Loans* 373
- Strict Liability and the Tortious Failure to Warn* 409
- Remedies for Hazardous Waste Injuries* 435

NOTES

- Administrative Law—A Look at Judicial Review of the
Department of Transportation's Rescission of the Passive
Restraint Standard—Motor Vehicle Manufacturers
Association v. State Farm Mutual Automobile Ins. Co.,
103 S. Ct. 2856 (1983)* Loretta S. Dunn 455

REMEDIES FOR HAZARDOUS WASTE INJURIES

INTRODUCTION

The exponential increase in the use of synthetic chemical products in the United States in the past fifty years has created a pressing problem: what to do with the hazardous waste¹ generated in their production. The history of the problem has been characterized by political scandals and tragic stories of hazardous waste disposal practices.² Congress, recognizing the enormity of the problem, acted to control the disposal of hazardous waste by passing the Resource Conservation and Recovery Act of 1976 [hereinafter referred to as RCRA].³ RCRA is a comprehensive scheme designed to regulate the life of chemicals from production to final disposal. Unfortunately, the RCRA neglected to provide for the cleanup of the millions of tons of hazardous waste that had already filled lagoons, landfills and barrels throughout the country.⁴ Congress, acting to fill the gap left by the RCRA, passed the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [hereinafter referred to as CERCLA]⁵ which was intended to provide for the clean up of the hazardous waste that had been disposed of improperly in the past.

These statutes were ambitious in goal but restricted by administrative apathy and a lack of funding.⁶ More significantly, neither of the statutes provided any meaningful relief for those who were injured by improper disposal of hazardous waste.⁷ The enforce-

1. Hazardous waste is defined as

a solid waste or combination of solid wastes whose quantity, concentration, or physical, chemical, or infectious characteristics may-

(A) cause, or significantly contribute to an increase in mortality, or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

42 U.S.C.A. § 6903(5) (West 1983).

2. See generally Wolf, *Hazardous Waste Trials and Tribulations*, 13 ENVTL. L. 367 (1983) (discusses the inadequacies of hazardous waste regulation over the past several presidential administrations).

3. 42 U.S.C.A. §§ 6901-87 (West 1983).

4. See generally Florini, *Issues of Federalism in Hazardous Waste Control: Cooperation or Confusion?*, 6 HARV. ENVTL. L. REV. 307 (1982).

5. 42 U.S.C.A. §§ 9601-9657 (West 1983).

6. See Wolf, *supra* note 2, at 369-402.

7. See generally Costle, *Introduction*, 9 ST. MARY'S L.J. 661 (1978) (reviews several statutes affecting the environment including the Clean Air Act and the Clean Water Act).

ment of RCRA and CERCLA was left almost entirely to the government.⁸ Private citizens were forced to look to ingenious construction of the Federal Tort Claims Act [hereinafter referred to as FTCA]⁹ or to the common law actions of nuisance, trespass, negligence or strict liability for relief from injuries caused by improper hazardous waste disposal practices.¹⁰

Although relief for hazardous waste injuries is available in theory, a private individual seeking redress for hazardous waste injuries is faced with overwhelming problems. The injuries caused by hazardous waste usually occur years after exposure making causal proof of the injury very difficult and resulting in a statute of limitations dilemma.¹¹ Furthermore, the duration of the litigation, which often requires months of extensive documentation search and in-depth scientific analysis, makes the suit too expensive for most private citizens.¹² Adequate redress for injury caused by improper disposal of hazardous waste stresses the inadequacy of current statutory and common law theories of recovery.

I. BACKGROUND

The hazardous waste problem originated in the chemical-industrial revolution during the last five decades. Post-World War II economic prosperity resulted in an increased demand for consumer products whose manufacture depended upon the availability of synthetic chemicals.¹³ Industrial production of nylon hose, chemical pesticides, plastic dishware, nonreturnable bottles, aluminum cans, plastic milk jugs, teflon, polyester, and countless other products has made modern life easier and more comfortable. However, the increased reliance on man made chemicals had a price that became increasingly apparent in the last decade. The dangerous nature and astronomical quantities of waste generated

8. See generally Wolf, *supra* note 2, at 367-69.

9. 28 U.S.C.A. §§ 2671-2680 (West 1965 & Supp. 1983).

10. See generally Maloney, *Judicial Protection of the Environment: A New Role for Common-Law Remedies*, 25 VAND. L. REV. 145 (1972) (review of the common law remedies for environmental actions).

11. See Note, *An Analysis of Common Law and Statutory Remedies for Hazardous Waste Injuries*, 12 RUT. L. REV. 145-46 (1980).

12. *Id.* at 149-50.

13. See Sokolow, *Hazardous Waste Liability and Compensation: Old Solutions, New Solutions, No Solutions*, 14 CONN. L. REV. 307, 309-10 (1982) (review of the statutory and common law remedies providing compensation for hazardous waste injuries).

in the manufacture of synthetic products posed a serious, often irreversible, and long lasting hazard to the environment and thus to human life.¹⁴

It became evident in the late 1970's that uncontrolled and careless disposal of industrial waste threatened the general public with direct exposure to the toxic elements generated as byproducts of the industrial manufacturing processes.¹⁵ It also became apparent that even accepted waste management procedures, especially the use of landfills, surface impoundments and lagoons, were inadequate in the face of ever increasing quantities of hazardous waste. Studies conducted by the Environmental Protection Agency [hereinafter referred to as EPA] revealed that the disposal of hazardous waste had left very large quantities of dangerous substances in and on the land.¹⁶ Moreover, these wastes were leaking from the disposal sites and contaminating all aspects of the environment.¹⁷

Nowhere in the history of the hazardous waste problem has the inadequacy of the hazardous waste regulatory process become more apparent than in the Love Canal¹⁸ incident. The tragedy of Love Canal began in the late 1920's when the Hooker Chemical and Plastics Corporation began using as an industrial landfill a canal that had been built by William J. Love. The canal had been built in an effort to generate cheap power by channeling water between the upper and lower Niagara River.¹⁹ For the next twenty-five years Hooker used the site to bury unknown quantities and types of industrial by-products and chemical wastes. In 1953, it filled in the canal with earth, covered it with a clay lid, and sold it to the Niagara Falls Board of Education for one dollar.²⁰ The School Board built a grammar school on one section, and on other sections developers built a community of single family homes which were occupied mainly by Hooker employees. Although clues such as exposed chemical drums, skin rashes, and dead vegetation appeared intermittently, the real danger did not become apparent

14. *Id.* at 310-11.

15. See Goldfarb, *The Hazards of Our Hazardous Waste Policy*, 19 NAT. RESOURCES J. 249, 251 (1979) (Mr. Goldfarb quotes the EPA estimate of 41 million tons per year as the amount of hazardous waste improperly disposed).

16. *Id.* at 250-51.

17. *Id.* at 252-54.

18. See Wolf, *supra* note 2, at 403.

19. *Id.* at 404.

20. *Id.* at 405.

until 1976 when, after a season of unusually heavy rains, the dormant canal overflowed, releasing toxic chemicals into the surrounding environment.²¹

After two years of citizen outrage at the slow response by local and state authorities and the EPA to the hazards of Love Canal, the story became national news when the front page of the New York Times contained a report on the threat of chemical exposure caused by the Love Canal disaster.²² Soon thereafter, the State of New York evacuated the homes located at Love Canal, closed the school, and turned the community into a ghost town. Hundreds of displaced families, millions of dollars in cleanup costs, and the effective condemnation of the entire area highlight the results of a hazardous waste crisis.²³

Also illustrative of the disposal procedure responsible for the origin of the hazardous waste crisis is the incident that became known as the "valley of the drums."²⁴ Seventeen thousand drums of chemicals were stored on a seven-acre site only twenty-five miles south of Louisville, Kentucky.²⁵ As the drums, exposed to the open atmosphere, began to deteriorate, their toxic contents slowly leaked onto the ground and contaminated the groundwater and watershed feeding the Ohio River, a source of drinking water for many communities.²⁶ In 1979, the EPA tested soil and water samples in the area and found approximately 200 organic chemicals and 30 heavy metals contaminating the environment.²⁷ This open storage form of hazardous waste disposal was frequently the result of storage at leased sites, which were later abandoned.²⁸

The national attention generated by the Love Canal scandal abated despite the fact that hazardous waste continued to be deposited in thousands of disposal sites throughout the country.²⁹

21. *Id.*

22. *Id.* at 406.

23. *Id.*

24. *Id.* at 412 (this incident is distinguishable from Love Canal in that it illustrates the hazards of open storage of hazardous waste in drums above ground).

25. *Id.* at 418 (improper disposal of hazardous waste not only contaminates surface water but also causes air pollution, food chain contamination, ground water contamination and can result in fires and explosions. *Id.* at 419-22).

26. *Id.* at 412.

27. *Id.*

28. *Id.* (a waste processing firm, in Lowell, Massachusetts, declared bankruptcy and abandoned 20,000 rusty and leaky barrels of hazardous waste).

29. *Id.* at 414 (In 1979, the EPA estimated that 32,000 disposal sites contained hazardous waste. 20,000 of these sites were active, while the other 12,000 were abandoned. 1200 to

However, on December 16, 1982, the House's contempt citation against Anne Burford, director of the EPA, for refusal to turn over documents relating to the EPA's enforcement of the hazardous waste cleanup program which had been subpoenaed by the Public Works and Transportation Subcommittee initiated a confrontation between Congress and the EPA that again brought national attention to the hazardous waste problem.³⁰ The controversy eventually led to Mrs. Burford's resignation amid charges of wrongdoing concerning EPA's hazardous waste cleanup program and allegations of a coverup by the administration.³¹ Charges of "sweetheart" deals between the EPA and the industries it is supposed to regulate, suggestions of conflict of interest on the part of high ranking agency officials, and allegations of the use of newly acquired paper shredders to destroy documents in an attempted coverup, highlighted the reports of slow action by the EPA in cleaning up the hazardous waste.³² This conflict brought the inherent dangers of ineffective hazardous waste disposal to the center of public attention in the same manner that the Love Canal disaster had only seven years earlier. More significantly, it highlighted the lack of effective legal resources for dealing with the generation, handling, disposal and cleaning up of hazardous waste. Both statute and common law may provide some relief to the public and private injuries resulting from hazardous waste disposal, but, as will be discussed below, they are either woefully inadequate or prohibitively difficult to maintain.

II. STATUTORY REMEDIES

In an action to recover damages for hazardous waste injuries, the plaintiff has three principal statutory remedies: RCRA, CERCLA and FTCA. Of these, only the FTCA provides for compensation for personal injuries; RCRA provides only for injunctive relief, and CERCLA provides compensation for environmental clean up.

A. Resource Conservation and Recovery Act

Concern for the environment and the public health led Congress

2000 of the sites presented an immediate danger to the environment). National attention on hazardous waste disposal was reignited with the disclosure of improper disposal of dioxin in Times Beach, Missouri in 1983.

30. 38 Cong. Q. Almanac 451 (1982).

31. 41 Cong. Q. Weekly Reports 495 (1983).

32. 41 Cong. Q. Weekly Reports 333 (1983).

to enact RCRA.³³ RCRA established a complex and extensive "cradle to grave" scheme for the regulation of the generation and disposal of hazardous waste.³⁴ Treaters, storers, and disposers are required to obtain permits to operate³⁵ and are required to maintain a manifest system that keeps track of hazardous waste from generation to final disposal.³⁶ RCRA also established an identification and listing process to aid in enforcing RCRA and a mandatory set of operating standards for generators, transporters, and operators involved in the life cycle of hazardous waste.³⁷

More importantly, RCRA contains a provision that authorizes the administrator of the EPA to sue to restrain any hazardous waste disposal activity that presents "an imminent and substantial endangerment to health or the environment."³⁸ Suits filed by the Justice Department effected a judicial interpretation of RCRA's "imminent and substantial endangerment" provision as allowing injunctive relief for threatened harm.³⁹ The statute expressly authorizes private citizen suits.⁴⁰ However, only injunctive relief was provided; no right of action for compensation was authorized.⁴¹ This effectively makes the RCRA useless as a remedy for the individual who has been injured by improper hazardous waste disposal practices.

Even when enforced by the EPA, the regulation of hazardous waste that Congress intended has not been achieved by RCRA. The expense and lengthy nature of the extensive litigation required to establish liability for hazardous waste disposal and the difficulty in isolating the cause of the injury can result in years of media debate and court action while the harm caused by the hazardous waste goes unabated.⁴² Also, adequate monitoring of the manifest system imposed by RCRA became unmanageable when

33. 42 U.S.C.A. §§ 6901-6987 (West 1983).

34. See Sokolow *supra* note 13, at 314.

35. 42 U.S.C.A. § 6925 (West 1983).

36. *Id.* at § 6922(5). A manifest system is a log of incoming and outgoing locations.

37. *Id.* at §§ 6922-6924.

38. *Id.* at § 6973.

39. See *e.g.* U.S. v. Solvents Recovery Service of New England, 496 F. Supp. 1127 (D. Conn. 1980).

40. 42 U.S.C.A. § 6972 (West 1983).

41. See Sokolow, *supra* note 13, at 315.

42. *Id.* at 315-16. It should be noted that injunctions are available under § 6973 for imminent and substantial endangerment. 42 U.S.C.A. § 6973.

thousands of manifests were filed yearly.⁴³ This problem was further complicated when some companies regulated by the RCRA decided to falsify the manifests and write off the civil penalties imposed as a result of falsification as a cost of doing business.⁴⁴

RCRA's success was also limited by Congress' failure to include abandoned and inactive disposal sites in the regulatory scheme. RCRA was enacted to prevent future health problems by regulating disposal of hazardous waste generated after enactment and unfortunately did not anticipate problems associated with past accumulation of hazardous waste.⁴⁵ Thousands of chemical sites containing tons of highly toxic hazardous waste lie dormant, posing immediate danger to public health and the environment.⁴⁶ Thus, RCRA left a gap in hazardous waste regulation that posed an imminent threat to the environment.⁴⁷

B. Comprehensive Environmental Response, Compensation, and Liability Act

Congress attempted to fill the gap left by RCRA in hazardous waste regulation by enacting the Comprehensive Environmental Response, Compensation and Liability Act of 1980.⁴⁸ While the thrust of RCRA was to prevent future problems, CERCLA was meant to correct the problems caused by decades of improper disposal methods.⁴⁹ CERCLA provides for emergency response to hazardous waste release and clean up of inactive hazardous waste disposal sites by establishing a 1.6 billion dollar trust fund⁵⁰ primarily financed by a tax on companies that generate hazardous waste.⁵¹ CERCLA authorizes action whenever there is a release or a substantial threat of a release of hazardous waste that may present an imminent and substantial danger to public health, welfare or the environment.⁵² Additionally it provides for identification of

43. See Rea, *Hazardous Waste Pollution: The Need for a Different Statutory Approach*, 12 ENVTL. L. 443, 457 (1982).

44. *Id.*

45. See Sokolow, *supra* note 13, at 316.

46. See Wolf, *supra* note 2, at 412.

47. See Sokolow, *supra* note 13, at 316.

48. 42 U.S.C.A. §§ 9601-9657 (West 1983) (usually referred to as the "superfund").

49. See Florini, *supra* note 4, at 319.

50. 42 U.S.C.A. § 9631 (West 1983).

51. *Id.* at § 9631(b)(1)(A) (West 1983); 26 U.S.C.A. § 4661(b) (West 1980 & Supp. 1983).

52. *Id.* at § 9604.

past disposal sites and shifts liability for the cost of removing hazardous waste releases, as well as the damage caused to the environment, to the owners and operators of disposal sites.⁵³

CERCLA's ambitious goal of providing quick cleanup of hazardous waste releases into the environment and remedial cleanup of abandoned disposal sites are appropriate steps in rectifying the problem created by fifty years of careless hazardous waste disposal. Unfortunately, the 1.6 billion dollars allocated is estimated as sufficient to clean up only 170 of 14,000 hazardous waste disposal sites nationwide.⁵⁴ Also, CERCLA has a liability ceiling of fifty million dollars which seems inadequate in light of immeasurable damage to the environment that can result, such as at the Love Canal.⁵⁵

Used together, RCRA and CERCLA provide the government with a regulatory scheme that could prevent some of the egregious hazardous waste disposal practices of the past and clean up the problems those practices created. However, lack of funding for the agencies charged with enforcing the statutes and slow administrative action by those same agencies have hindered the effective use of these statutes.⁵⁶ Significantly, RCRA and CERCLA allow citizens to sue to force cleanup of hazardous waste sites but not for damages to property or compensation for personal injuries.⁵⁷ This forces the plaintiff to look for alternative remedies to recover damages from hazardous waste injuries.

C. The Federal Tort Claims Act

For recovery of damages from hazardous waste injuries, a plaintiff may elect to sue the United States under the Federal Tort Claims Act⁵⁸ for ineffective regulation of hazardous waste generation and disposal. As the United States is only liable under the FTCA to the extent that a private individual would be under the same circumstances, the tort law of the jurisdiction where the injury occurred must be analyzed to determine if a particular

53. 42 U.S.C.A. § 9607 (West 1983).

54. See Wolf, *supra* note 2, at 407-11.

55. 42 U.S.C.A. § 9607 (West 1983).

56. 41 Cong. Q. Weekly Reports 452 (1983).

57. 41 Cong. Q. Weekly Reports 204 (1983) (Congress is pushing for legislation that would compensate victims of hazardous waste injuries. Also note that victim's compensation was initially dropped from CERCLA when it was passed).

58. 28 U.S.C.A. §§ 2671-2680 (West 1965 & Supp. 1983).

theory is available to impose liability on an individual for activities similar to those conducted or omitted by the United States.⁵⁹ Generally, one who assumes to act, even though gratuitously, may become subject to the duty to act carefully, if he acts at all.⁶⁰ An injured plaintiff could argue that the United States has assumed the supervision of the nation's hazardous waste sites by enacting RCRA and CERCLA and that it has breached its duty of reasonable care by failing to properly control the generation and disposal of hazardous waste.

To recover under the "gratuitous undertaking" theory, the injured plaintiff must show that the actor owed a duty to provide specific services or, absent this factor, that the beneficiary relied on the undertaking of the obligation to his or her detriment.⁶¹ The injured plaintiff must also prove that the undertaking of the obligation increased the intended beneficiaries' risk of harm.⁶² As the government did not intend to provide benefits for specific individuals, the injured plaintiff must necessarily argue that the federal government's assumption of the regulatory responsibility for hazardous waste caused private citizens and local health authorities to rely on their competency; that failure to regulate adequately increased the risk of harm; and that the plaintiff relied on the regulatory process to his detriment.⁶³

The government would likely raise, in response to a claim of governmental assumption of regulatory responsibility, the discretionary function exception to the FTCA.⁶⁴ This exception provides that any claim based upon the performance or the failure to perform a discretionary function by a Government employee or federal agency is not an includable claim in a FTCA action.⁶⁵ "Discretionary function" has been found to include the initiation of programs and activities, determinations made by executives or

59. *Id.* at section 2674 (no interest or punitive damages are allowed).

60. RESTATEMENT (SECOND) OF TORTS § 323 (1965).

61. *Id.*

62. *Id.*

63. For an example of such arguments in a case where the government nevertheless prevailed see *Raymer v. United States*, 482 F. Supp. 432 (W.D. Ky. 1979), *rev'd*, 660 F.2d 1136 (1981), *cert. den.* 102 S.Ct. 2009 (1982) (no government liability for negligent supervision of mine operations). See also *Clemente v. United States*, 567 F.2d 1140 (1st Cir. 1977) *cert. denied* 435 U.S. 1006 (1978) (no liability by government for failure to warn aircraft passengers of safety violations).

64. 28 U.S.C.A. § 2680(a) (1965 & Supp. 1983). See also *Raymer v. United States*, 482 F. Supp. 432 (W.D. Ky. 1979), *rev'd*, 660 F.2d 1136 (1981), *cert. den.* 102 S.Ct. 2009 (1982).

65. *Id.*

administrators in establishing plans, specifications or schedules of operation, and the acts of subordinates in carrying out the operations of Government in accordance with official direction to them.⁶⁶ When considering the discretionary function defense, the courts have distinguished between decisions at the planning stage and at the operational stage.⁶⁷ Generally, the exception has been applied to decisions made in the planning stage,⁶⁸ while decisions made in the operational stage have been considered as the exercise of a discretionary function.⁶⁹

Additionally, for claims occurring after January 18, 1967, a tort claim against the United States must be filed within two years after the claim accrues as a prerequisite to recovery under the FTCA.⁷⁰ Presumably, this statute of limitations will begin to run when the injured plaintiff discovers, or in the exercise of reasonable diligence should have discovered, the injury and learns of the presence of levels of hazardous waste sufficient to cause the injury.⁷¹

As RCRA and CERCLA do not provide for compensation for personal injuries or for damage to property, the FTCA may be an alternative for citizens seeking relief for hazardous waste injuries. However, even if the plaintiff overcomes the initial barriers discussed above, he still must show the elements of the tort to recover from the government.⁷² This often insurmountable burden is shared by common law remedies available to those injured by hazardous waste, discussed in the following section of this comment.

III. COMMON LAW REMEDIES

The common law provides to those seeking relief for hazardous waste injuries the following possible theories for recovery: nuisance, trespass, negligence and strict liability.

66. See, e.g., *Dalehite v. United States*, 346 U.S. 15 (1953), *rehearing den.* 346 U.S. 880 (1953), and 347 U.S. 924 (1954).

67. See *Raymer v. United States*, 482 F. Supp. 433 (W.D. Ky. 1979), *rev'd on other grounds*, 660 F.2d 1136 (1981).

68. *Blessing v. United States*, 447 F. Supp. 1160 (E.D. Pa. 1978) (no liability for damage caused by backed up waters of a dam because the decision to build the dam was made in the planning stage of the project).

69. *Indian Towing Co. v. United States*, 350 U.S. 61 (1955) (liability imposed for government's failure to operate a lighthouse).

70. 28 U.S.C.A. § 2401(b) (West 1978 & Supp. 1983).

71. See *United States v. Kubrick*, 444 U.S. 111 (1979) (case involves statute of limitations under the FTCA for a veteran claiming disability for hearing loss).

72. See generally *Maloney supra* note 10.

A. Nuisance

The nuisance theory provides a powerful common law remedy that encompasses an infinite variety of wrongs and has served as the backbone of modern environmental law.⁷³ It is divided into two causes of action: private nuisance and public nuisance. Private nuisance is a substantial and unreasonable interference with the use and enjoyment of an interest in land that results from either intentional, negligent, or reckless conduct or an activity that is abnormally dangerous.⁷⁴ The private nuisance theory offers no relief to those personally injured who do not possess the land which is the subject of the alleged nuisance.⁷⁵ Furthermore, even those who possess the land can find it difficult to recover under a private nuisance theory as they must demonstrate substantial and unreasonable interference with their use and enjoyment of the land before recovery is permitted.⁷⁶

Establishing that the interference with plaintiff's interest in land is substantial should pose few problems. Prosser noted that "[w]here the invasion affects the physical condition of the plaintiff's land, the substantial character of the interference is seldom in doubt."⁷⁷ However, substantial interference, while not usually difficult to demonstrate, has some limitations. The injury must be real and appreciable before the plaintiff can recover. The law does not concern itself with "trifles" such as the occasional whiff of smoke or the temporary muddying of a well.⁷⁸ Certainly the pollution of one's drinking water by leachates from buried hazardous waste or the effective condemnation of one's property because of noxious or deadly fumes would be a substantial interference, however.

Determining whether defendant's interference is unreasonable involves balancing the "gravity of the harm to the plaintiff" with "the utility of the defendant's conduct."⁷⁹ Factors relevant to bal-

73. Rogers, ENVTL. L. 100 (1977). See generally McRae, *The Development of Nuisance in the Early Common Law*, 1 U. FLA. L. REV. 27 (1948) (gives a history of the development of nuisance law).

74. RESTATEMENT (SECOND) OF TORTS § 822 (1979).

75. W. PROSSER, HANDBOOK OF THE LAW OF TORTS 593-94 (4th ed. 1971) (any interest in land is sufficient. Leases, easements, etc. are protected under the nuisance theory. However, a licensee, lodger or employee cannot maintain a nuisance action). See also Rogers, *supra* note 73, at 108.

76. W. PROSSER, HANDBOOK OF THE LAW OF TORTS 593 (4th ed. 1971).

77. *Id.* at 578.

78. *Id.* at 577-78.

79. RESTATEMENT (SECOND) OF TORTS § 826 (1979). See also, Rodgers *supra* note 73, at 112.

ancing the equities include the extent and nature of the injury, the social value of the use of the land, the suitability of the locality and the burden of avoiding the harm imposed on the person harmed.⁸⁰ The utility of the conduct is affected by its social value, its suitability to the locality and the impracticality of avoiding invasion.⁸¹

Even if an injured plaintiff shows substantial and unreasonable interference, some courts have been hesitant to grant injunctive relief when it would effect large industries that provide jobs necessary for the livelihood of the community. In *Boomer v. Atlantic Cement Co.* the trial court held that Atlantic's emission of dust and other pollutants amounted to a nuisance even though the plant had taken "every available and possible precaution" to prevent the emissions.⁸² The New York Court of Appeals, however, used a "balancing of the equities test" to weigh the harm to local citizens against the economic interest that Atlantic represented to the community.⁸³ Instead of shutting Atlantic down, the court granted an injunction conditional upon Atlantic's payment of permanent damages to the landowners to compensate them for the total economic damage caused to their property by the plant's operation.⁸⁴ The court concluded that a complete shutdown of the plant would be too harsh a penalty to demand and that a threat of similar damage suits by others would provide the incentive for Atlantic to develop more efficient pollution control devices.⁸⁵ The court, in essence, granted Atlantic a tax deductible license for a continuing nuisance.

The plaintiff seeking to rid his community of a noxious hazardous waste facility under the private nuisance theory in a court

80. RESTATEMENT (SECOND) OF TORTS § 827 (1979). See also, PROSSER, *supra* note 71, at 596-97.

81. RESTATEMENT (SECOND) OF TORTS § 828 (1979).

82. 55 Misc. 2d 1023, 1024, 287 N.Y.S.2d 112, 113-14 (1967), *aff'd*, 30 A.D.2d 480, 482, 294 N.Y.S.2d 452, 454 (1968), *rev'd*, 26 N.Y.2d 219, 228, 257 N.E.2d 870, 875, 309 N.Y.S.2d 312, 319 (1970).

83. 26 N.Y.2d 219, 257 N.E.2d 870, 309 N.Y.S.2d 312 (1970). *But see* *Whalen v. Union Bag and Paper Co.*, 208 N.Y. 15, 101 N.E. 805, 806 (1913), where the court held that "Although the damage to the plaintiff may be slight as compared with the defendant's expense of abating the condition, that is not a good reason for refusing an injunction."

84. 26 N.Y.2d at 225, 257 N.E.2d at 873, 309 N.Y.S.2d at 316-17. *But see* *Spur Industries Inc. v. Del E. Webb Dev. Co.*, 108 Ariz. 178, 494 P.2d 700 (1972) (injunction granted closing down stock yard but conditioned upon plaintiff's paying defendant's costs of moving or shutting down).

85. *Id.*

favoring the "balancing of the equities" rationale faces a difficult burden. Even if he shows the elements of nuisance, the court could simply grant permanent damages, effectively condemning his land.⁸⁶ The plaintiff is then forced to live in a noxious, offensive environment or to move elsewhere. Additionally, courts have been reluctant to grant injunctions that require a defendant to move or shut down when the defendant is making a good faith effort to control the problem.⁸⁷ Most courts faced with this situation have granted injunctive relief only to the extent that it compels the defendant to use "state of the art technology" to control the pollution.⁸⁸

A public nuisance, on the other hand, is an unreasonable interference with a right common to the general public.⁸⁹ Plaintiff's ability to recover using the public nuisance theory in a hazardous waste cause of action may depend on whether damages or injunctive relief is sought. Injunctive relief will be granted only if the litigant has standing to sue as a representative of the general public, a member of a class in a class action, or a citizen in a citizen's action.⁹⁰ However, if the litigant seeks damages he must demonstrate that the injury he has sustained is different in kind from that suffered by the general public.⁹¹ In hazardous waste litigation, public nuisance is a rarely used theory due to the difficulty in showing that plaintiff's injury is different in kind from that of the general public.⁹²

The effectiveness of a nuisance action for abatement of irresponsible hazardous waste disposal is also limited by the defenses that are available to the defendant. Defendant could argue that the plaintiff assumed the risk of injury by coming to the nuisance when defendant's enterprise predates plaintiff's moving to the area.⁹³ This can be particularly effective if it can be shown

86. Rogers, *supra* note 73, at 143-44.

87. *Id.* at 122-24.

88. *Id.*

89. RESTATEMENT (SECOND) OF TORTS § 821B (1982). See generally Prosser, *Private Actions for Public Nuisances*, 52 VA. L. REV. 997 (1966).

90. See Comment, *The Environmental Law Suit: Traditional Doctrines and Evolving Theories to Control Pollution*, 16 WAYNE L. REV. 1085 (1970).

91. W. PROSSER, *supra* note 75, at 587 (there is general agreement that plaintiff's damage must be different in kind, rather than degree, from that shared by the general public).

92. *Id.*

93. See, e.g. *Wasahak v. Moffet*, 379 Pa. 441, 109 A.2d 310 (1954) (the court agreed that plaintiffs were suffering from an annoyance but, because they chose to move to the area in order to be closer to their place of employment, reversed a jury award for damages).

that plaintiff knew of the risk and acted voluntarily. Additionally, laches,⁹⁴ statute of limitations⁹⁵ and the doctrine of prescriptive rights⁹⁶ may prevent plaintiff's recovery.

As these limitations demonstrate, the law of nuisance, while broad in scope, may impose a serious burden on the injured plaintiff trying to recover for hazardous waste injuries. The plaintiff bears the burden of showing "substantial and unreasonable interference" with the use and enjoyment of his land. Furthermore, he must consider that the court, using specious reasoning, may "balance the equities" of the situation and leave plaintiff sitting near a potential deadly hazardous waste site. Once proven, the plaintiff must negate a series of defenses that are available to defendant that can limit or usurp his right to redress. Because of these limitations, nuisance can be of only limited value in hazardous waste litigation.⁹⁷

B. Trespass

Trespass provides a cause of action through which an injured plaintiff can recover for damage to his property due to a direct invasion of a possessory interest in land. At common law trespass was actionable without proof of intent or negligence.⁹⁸ However, the strict application of this standard has been judicially eroded to the extent that an intentional or negligent intrusion by the defendant must be proven by plaintiff in order to recover.⁹⁹ Similarly, it has been suggested that liability should be imposed only in cases of intentional or negligent conduct.¹⁰⁰ Once plaintiff has proven trespass, however, the defendant is liable for any visible and tangible damage caused to the land, to the possessor or his family,

94. See, e.g. *Brown v. Allied Steel Product Corp.*, 273 Ala. 184, 136 So. 2d 923 (1962) (recovery denied because plaintiff waited 18 months after the plant began operation to bring suit).

95. See, e.g. *Lynn Mining Co. v. Kelly*, 394 S.W.2d 755 (Ky. 1965) (Statute of limitations involving a temporary nuisance not violated by suit). See generally *Davis, Tort Liability and the Statutes of Limitations*, 33 Mo. L. REV. 171 (1968).

96. See, e.g. *W.G. Duncan Coal Co. v. Jones*, 254 S.W.2d 720 (Ky. 1953) (use of stream to vent poisonous mine water for 15 years gave defendant a prescriptive right to continue to use the stream even if overflow damaged plaintiff's crops).

97. See generally *Hines, Nor Any Drop to Drink: Public Litigation of Water Quality*, 52 IOWA L. REV. 186, 196-202 (1966).

98. W. PROSSER, *supra* note 75, at 63-66.

99. *Id.* at 63-65.

100. RESTATEMENT (SECOND) OF TORTS § 166 (1965).

and to chattels on the land.¹⁰¹ Even when there is no tangible damage, the plaintiff can recover nominal damages and, if the defendant's conduct was malicious, punitive damages.¹⁰²

One restriction which prevents the wide utilization of trespass actions in hazardous waste litigation is that there must be a direct invasion of plaintiff's land by a tangible object that is visible to the naked eye.¹⁰³ Typically, a hazardous waste injury is caused by seepage of micrograms of highly toxic chemicals at a rate measured in inches per year through the ground water system, only to turn up in plaintiff's drinking water miles from the disposal site, or is caused by invisible airborne particles that settle on plaintiff's land over a lengthy period of time.¹⁰⁴ These circumstances make it impossible to prove that a tangible object visible to the naked eye was responsible for the damage.

There has been some erosion of the "visible tangible object" requirement in recent years. In *Martin v. Reynolds Metals Co.*¹⁰⁵ a cattle rancher brought a trespass action against Reynold's Aluminum alleging that his cattle had been poisoned by invisible airborne fluoride particles that had escaped from Reynold's manufacturing plant and settled on plaintiff's land and in plaintiff's water supply. Defendant contended that the mere settling of fluoride particles on plaintiff's land was not a direct invasion of property and, therefore, not a trespass.¹⁰⁶ The Supreme Court of Oregon disagreed with the defendant's contention. Holding for the plaintiff the court stated:

It is quite possible that in an earlier day when science had not yet peered into the molecular and atomic world of small particles, the courts could not fit an invasion through unseen physical instrumentalities into the requirement that a trespass can result only from a direct invasion. . . . [W]e may define trespass as any intrusion which invades the possessor's protected interest in exclusive possession, whether that intrusion is by visible or invisible pieces of matter or by energy which can be measured only by the mathematical language of the physicists.¹⁰⁷

101. W. PROSSER, *supra* note 75, at 67.

102. *Id.* at 66-68.

103. *Id.* at 66.

104. See generally Murphy, *Environmental Law: New Legal Concepts in the Antipollution Fight*, 36 MO. L. REV. 78, 84-85 (1971).

105. 221 Ore. 86, 342 P.2d 790, *cert. denied*, 362 U.S. 918 (1960).

106. *Id.*

107. *Id.* at 93-94, 342 P.2d at 793.

Apparently, common law courts required tangible evidence of an invasion because of the uncertainty of proof.¹⁰⁸ However, modern technological advances in instrumentation and analysis techniques allow scientists to increase the certainty of proof in hazardous waste litigation and lessen the need for the tangible evidence.¹⁰⁹ As a result, modern courts which recognize the technical advances of the last fifty years could permit recovery for injuries caused by hazardous waste, under the trespass theory.

C. Negligence

Negligence is defined as conduct which falls below the standard established by law for the protection of others against unreasonable risk of harm.¹¹⁰ Negligent conduct may consist of either an act or a failure to act when there is a duty to do so.¹¹¹ Generally, and in hazardous waste litigation, the plaintiff has the burden of proving all of the following: (a) facts which give rise to a legal duty on the part of the defendant to conform to the standard of conduct established by law for plaintiff's protection (b) failure of the defendant to conform to the standard of conduct (c) the failure is the legal cause of the harm suffered by the plaintiff, and (d) the plaintiff has in fact suffered a legally compensable harm.¹¹²

Negligence is often difficult to prove but this can be particularly so in hazardous waste litigation. First, the disposal of hazardous waste may have been in a manner that was reasonable at the time because the harmful effects were not known and did not become evident for decades.¹¹³ Second, the plaintiff must trace the origin of the hazardous waste and its generator. This poses a difficult problem when several different hazardous waste generators may have disposed of the hazardous waste at the same site. The trace usually requires extensive documentation searches and costly scientific and geological tests, an expense few potential plaintiffs can afford.¹¹⁴ Third, the type of injury resulting from hazardous

108. *Id.*

109. See Rogers, *supra* note 73, at 156-58. But see, Note, *Trespass-Nuisance-Election of Remedies: Invisible Fluoride Compound Settling Upon Plaintiff's Land Constitutes Trespass Rather Than Nuisance*, 39 TEX. L. REV. 244-45 (1960) (majority of courts have held that invasions by intangible objects, when actionable, constitute a nuisance).

110. RESTATEMENT (SECOND) OF TORTS § 282 (1965).

111. *Id.* at § 284.

112. W. PROSSER, *supra* note 75, at 143-44.

113. See Wolf, *supra* note 2, at 368.

114. See Rea, *supra* note 43, at 465.

waste disposal may make proof of causation even more difficult. These injuries often manifest themselves years after exposure to the toxic elements and can be caused by numerous other elements including incidence of random occurrence in the population.¹¹⁵ This delay may create difficulties for filing the action within the statute of limitations and makes proof of causation by a particular defendant virtually impossible. Finally, the toxic element causing the injury may have been generated by a synergistic chemical reaction of several hazardous waste elements disposed of in the same site. This makes tracing the liability to a specific generator very problematic, leaving the often bankrupt hazardous waste site operator the only responsible party.¹¹⁶ All these considerations make recovery using the negligence theory a difficult task for the injured plaintiff in hazardous waste litigation.

D. Strict Liability

A more promising theory of recovery available to an injured plaintiff is that of strict liability for abnormally dangerous activities. This theory abolishes the requirement that the plaintiff, who is seeking damages for injuries resulting from improper disposal of hazardous waste, prove the defendant's lack of due care. The plaintiff need only show that defendant's activities were "abnormally dangerous" and were the cause of plaintiff's injury.¹¹⁷

The infamous case of *Rylands v. Fletcher*¹¹⁸ established this doctrine of strict liability. Defendants, owners of a mill overlaying abandoned coal mine shafts, constructed a reservoir to contain the water to power their mill. The water burst through the filled-up shaft of an abandoned coal mine and through connecting shafts into plaintiff's adjoining mines.¹¹⁹ Defendants had no prior knowledge of the latent defect in the shaft and were free from fault. Existing common law actions afforded plaintiff no redress for his injuries.¹²⁰ Justice Blackburn saw the need to control dangerous new technologies and imposed liability on other grounds:

115. See Singer, *supra* note 12, at 123-26.

116. See generally Sokolow, *supra* note 13, at 322-34. See also Wolf, *supra* note 2, at 368-69.

117. Rogers, *supra* note 73, at 158.

118. 159 Eng. Rep. 737 (1865), *rev'd* 1 L.R. Ex. 265 (1866), *aff'd* 3 L.R. H.L. 330 (1868).

119. Rogers, *supra* note 73, at 158.

120. *Id.* (Trespass was unavailable since the flooding was not direct and immediate. Nuisance was unavailable because the conduct was not offensive to the senses and the damages were nonreoccurring).

We think that the true rule of law is that the person who for his purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and if he does not do so, is *prima facie* answerable for all the damage which is the natural consequence of its escape.¹²¹

Lord Cairns viewed the problem as a "non-natural" use of the land for which defendants should be liable.¹²² Thus, the injured plaintiff need only demonstrate the dangerous nature of the hazardous waste and prove that his injuries were caused by it.

Although American jurisdictions generally follow the *Rylands* rule, some courts have limited its effectiveness where large economic concerns have dominated the locale. In *Turner v. Big Lake Oil Co.*¹²³ the court refused to impose strict liability for damages caused by the escape of salt water from ponds used by defendants in the operation of oil wells. The court's rationale was that the oil business was vital to Texas and that the ponds were a necessary part of the oil industry.¹²⁴ Similarly, Delaware, noted for its chemical industry, refused to hold DuPont strictly liable for injuries caused by the escape of deadly chlorine gas from its chemical plant: "[I]t was not unlawful for DuPont to have on its premises chlorine gas, nor was its presence there unusual, and it cannot be said that the mere possession of chlorine gas by DuPont without more was dangerous per se in light of recognized industrial use."¹²⁵ Thus, strict liability for hazardous waste injuries may be denied when the waste is a necessary by-product of a defendant which is a vital economic entity in the community, a problem shared by the nuisance action.¹²⁶

Similarly, it has been suggested that strict liability is applicable to a broad range of activities if a balancing test, similar to the "balancing of the equities" test used in nuisance theory, is applied.¹²⁷ The following factors are considered in the balancing test: (a) existence of a high degree of risk of some harm to the person, land or chattels of others; (b) likelihood that the harm that results from it will be great; (c) inability to eliminate the risk by

121. 1 L.R. Ex. 279-80.

122. 3 L.R. H.L. at 338-39.

123. 128 Tex. 155, 96 S.W.2d 221 (1936).

124. 128 Tex. at 170, 96 S.W.2d at 226.

125. *Fritz v. E.I. DuPont de Nemours and Co.*, 6 Terry (Del.) 427, 437, 75 A.2d 256, 261 (1950).

126. See *supra* notes 82-85 and accompanying text.

127. RESTATEMENT (SECOND) OF TORTS § 519 (1977).

the exercise of reasonable care; (d) extent to which the activity is not a matter of common usage; (e) inappropriateness of the activity to the place where it is carried on; and (f) extent to which its value to the community is outweighed by its dangerous attributes.¹²⁸ Plaintiff could argue in hazardous waste litigation that the storage and disposal of hazardous waste is an abnormal use of land since it presents a high degree of risk and a likelihood that escape of hazardous waste will result in great harm. Additionally, the plaintiff can argue that storage and disposal of hazardous waste is not a common use of the land and the danger from it cannot be eliminated by reasonable care. Defendant would likely respond that the benefit gained from the storage and disposal of hazardous waste is greater than the danger it poses. Convincing the court that the equities favor the plaintiff, however, remains a difficult burden. And as with the other common law theories of recovery discussed above, proof of causation and the statute of limitations barrier are the most serious limitations on the strict liability theory.¹²⁹

CONCLUSION

RCRA and CERCLA have not been effective in regulating the disposal of hazardous waste due to lack of funding and administrative neglect which have hindered governmental enforcement of the statutes. Additionally, private plaintiffs seeking redress for hazardous waste injuries are without appropriate remedies. RCRA and CERCLA offer only injunctive relief and provide no compensation for personal injuries or property damage. The FTCA and common law remedies may provide relief but are not without formidable burdens. Proving causation, overcoming the statute of limitations and enduring lengthy and costly litigation are often hurdles the private citizen cannot overcome.

Solving these problems will require congressional action. Loopholes exempting from regulation small businesses that handle less than one thousand kilograms of hazardous waste per month could be closed.¹³⁰ Congress could also provide adequate funding for the

128. *Id.* at § 520.

129. See Sokolow, *supra* note 13, at 321-31 (often the courts will look to the "deep pocket" theory which emphasizes the defendant's ability to pay for plaintiff's injuries through insurance by passing the costs on to customers).

130. 38 Cong. Q. Almanac 457 (1982) (It is estimated that between one and eight percent of the hazardous waste is generated by exempt businesses).

enforcement of the statute by extending the tax until the hazardous waste is cleaned up, not just until CERCLA expires in 1985.¹³¹ Additionally, the victim compensation legislation proposed in the past could be enacted. Senator Stafford proposed legislation that would provide a limited no fault claim against the funds collected under CERCLA and allow damages exceeding the no fault limit to be recovered using traditional common law remedies.¹³² These steps, if taken by Congress, should certainly alleviate some of the harm caused by egregious hazardous waste disposal practices.

RAY GUFFEY

131. 41 Cong. Q. Weekly Reports 583-84 (1983) (Senator Hart proposes extending CERCLA 10 years and boosting the fund to 15 million dollars).

132. *Id.* See 38 Cong. Q. Almanac 457 (1982).