The Maturing Discipline of Environmental Prosecution

Robert Abrams*

INTRODUCTION

Only a few years ago environmental crimes were treated as low level, regulatory offenses that were rarely prosecuted. All too often, these crimes were handled with about the same level of seriousness as a traffic ticket. But new laws, a new recognition of the enormous environmental problems we face, and a vocal public outcry have created a different framework in which these issues are considered. The emergence of a new legal specialization — the environmental prosecutor — has been just one result of this sea of change in legal approaches and public attitudes toward the environment. The recent growth of criminal prosecutions in the environmental area was barely imaginable at the beginning of the 1980s.

This article examines various aspects of environmental criminal enforcement in New York State. Part I discusses the development of the state enforcement program, noting the influences on it of federal laws and trends in the area. Part II takes a close-up look at an area of enforcement in which New York is among the vanguard. This area is concerned with the mishandling of hazardous substances in the workplace. In *People v. Pymm*,[1] the right of New York State to prosecute employers for causing injury to employees through reckless handling of hazardous substances was upheld in the face of preemption claims. Finally, Part III notes the change in focus of New York enforcement efforts from midnight dumpers to otherwise law-abiding companies who engage in illegal polluting practices.

* Mr. Abrams was elected Attorney General of New York State in 1978 and subsequently re-elected in 1982, 1986, and 1990. B.A. 1960, Columbia College; LL.B. 1963, New York University School of Law. This article is an edited and revised text of a luncheon address given by the author at the Symposium on "Crimes Against the Environment: Current Policies and Future Trends in Environmental Criminal Enforcement," sponsored by the Columbia Journal of Environmental Law, at Columbia University School of Law, on March 8, 1991. Attorney General Abrams notes the assistance of Assistant Attorney General Clive I. Morrick with this article.

1. People v. Pymm, 76 N.Y.2d 511, 563 N.E.2d 1, 561 N.Y.S.2d 687 (1990).

I. THE DEVELOPMENT OF ENVIRONMENTAL CRIMINAL LAWS IN NEW YORK

Environmental criminal laws in New York have gone through four stages of development. In the first phase, most environmental violations were relatively minor offenses associated with the conservation laws — shooting deer out of season, for example.[2] On the federal level, there were also only a few, exceptional criminal offenses of broader scope during this early period, such as the Refuse Act of 1899, which imposed modest criminal penalties for dumping garbage into "any navigable water . . or tributary of any navigable water" within the United States.[3] Some strict liability offenses in New York law, first promulgated in the nineteenth century, survived, as they do today, and provided modest penalties for environmental offenses. For example, throwing offal or gas tar into public waters,[4] or depositing noisome or unwholesome substances near a public highway,[5] were, and still are, misdemeanors. But by and large, criminal enforcement was a tame, rarely used exception within New York State's conservation laws until the early 1970s.

The second stage of criminal enforcement for environmental offenses occurred in the 1970s, when New York, along with the federal government and many other states, overhauled its clean air and clean water laws.[6] Although these improvements established quite modest regulatory-type offenses, they marked an important step forward because they could be applied to individuals as well as to corporations.[7]

The third stage in the development of criminal environmental enforcement in New York came with the wave of legislation enacted at the federal and state level in response to the horrors of Love Canal in New York and notorious hazardous waste sites in other states, such as Missouri and California. In response to the

2. N.Y. ENVTL. CONSERV. LAW § 71-0921 (McKinney 1984) (formerly Conservation Law of 1911, c. 647, § 387).

3. 33 U.S.C. § 407 (1988). The Refuse Act is the common name for § 13 of the Rivers and Harbors Appropriation Act of 1899.

4. N.Y. ENVTL. CONSERV. LAW § 71-3503 (McKinney 1984).

5. *Id.* § 71-3501.

6. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972); Clean Air Act Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (1970); N.Y. ENVTL. CONSERV. LAW arts. 17, 19 (McKinney 1984).

7. *See, e.g.*, Comment, *The Criminal Responsibility of Corporate Officials for Pollution of the Environment*, 37 ALB. L. REV. 61 (1972).

problems made apparent by these sites, Congress passed the Resource Conservation and Recovery Act ("RCRA") in 1976 and the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund") in 1980.[8] These landmark laws included regulations to ensure safe management of hazardous wastes and to foster clean-up programs, reforms which changed the shape of environmental litigation forever.

RCRA at first contained only misdemeanor penalties. Then, in the 1980 amendments, felony penalties (up to two years imprisonment) were introduced for knowing transportation, storage, treatment or disposal of hazardous wastes without the necessary permits.[9] In 1984, the RCRA penalties were even further increased, providing for maximum penalties of up to five years imprisonment, and fines of up to $1 million.[10]

Both RCRA and CERCLA have similar New York counterparts.[11] In 1981, in the interests of sending a stronger signal to polluters that degradation of the environment would no longer be tolerated, the New York State Attorney General's office drafted New York's first criminal laws prohibiting knowing or reckless mishandling of hazardous wastes.[12] Knowing possession or disposal of more than 100 gallons, or reckless possession or disposal of more than 200 gallons of hazardous wastes without authorization became a class E felony, punishable by up to four years imprisonment.[13] If the volume reached 1500 gallons or 2500 gallons respectively, the offense level rose to a class D felony, punishable by up to seven years imprisonment, as did knowing possession or disposal of any amount of acute hazardous wastes without authorization.[14] Unauthorized disposal of lesser amounts of hazardous wastes where there were aggravating factors such as the wastes entering water, or causing injury to another, were also made class D felonies.[15] Finally, two levels of

8. Resource Conservation and Recovery Act, Pub. L. No. 94-580, 90 Stat. 2795 (1976) (codified at 42 U.S.C. §§ 6901-6987 (1988)); Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96-510, 94 Stat. 2767 (1980) (codified at 42 U.S.C. §§ 9601-9657 (1988)).

9. 42 U.S.C. § 6928(d) (1988).

10. Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, 98 Stat. 3221 (1984) (codified at 42 U.S.C. §§ 6901-6987 (1988)).

11. N.Y. ENVTL. CONSERV. LAW art. 27 and art. 71, tit. 27 (McKinney 1984).

12. *Id.* §§ 71-2707 to -2725.

13. *Id.* §§ 71-2707, -2711, -2721(1).

14. *Id.* §§ 71-2709, -2713, -2721(2).

15. *Id.* §§ 71-2713, -2721(2).

"dealing" in hazardous wastes (a class A misdemeanor punishable by up to a year in jail, and a class E felony) were created.[16] These offenses were aimed at unlawful trafficking in hazardous wastes.

Soon after the criminal statutes took effect in New York in 1985,[17] a special unit was created in the Environmental Protection Bureau at the Department of Law dedicated to the investigation and prosecution of environmental crimes. Within a few months, it became apparent that the criminal environmental statutes were still too limited and still incapable of addressing all the problems which warranted prosecution.

Thus, the fourth stage of criminal environmental enforcement, from 1986 through 1989, was initiated. During this period, the State Legislature passed amendments to New York's environmental statutes that gave prosecutors broader power than they previously had. The most innovative refinement was the "endangering" statute,[18] a significant and unique development that expanded the scope of environmental crimes by creating an entirely new class of offenses, including conduct that endangered public health, safety or the environment. The basic offense is any conduct, accompanied by a culpable mental state, leading to the unauthorized release — or even just the *possibility* of a release — of a substance that is hazardous to public health, safety or the environment.[19]

This law was inspired by the terrible accident in Bhopal, India in 1984, in which a cloud of toxic gas from a Union Carbide pesticide plant killed thousands of innocent people. The Attorney General's office conducted an investigation and concluded that such a tragedy *could* happen in New York; in fact, thousands of

16. *Id.* §§ 71-2715, -2717, -2721(3).

17. The new statutes relied for effectiveness on regulations promulgated by the New York Department of Environmental Conservation defining hazardous waste, and regulating its handling "from cradle to grave." The regulations so promulgated in New York were twice overturned due to administrative deficiencies in the promulgation process. People v. Harris, 104 A.D.2d 130, 483 N.Y.S.2d 442 (App. Div. 1984); People v. Macellaro, 131 A.D.2d 699, 516 N.Y.S.2d 950 (App. Div.), *appeal denied*, 70 N.Y.2d 801, 516 N.E.2d 1232, 522 N.Y.S.2d 119 (1987).

18. N.Y. ENVTL. CONSERV. LAW §§ 71-2710 to -2714 (McKinney Supp. 1991).

19. The definition of "release" in the statute is as follows:

> "Release" means any pumping, pouring, emitting, emptying, or leaching, directly or indirectly, of a substance so that the substance or any related constituent thereof may enter the environment, or disposal of any substance.

Id. § 71-2702(13).

pounds of toxic chemicals *are* accidentally released every year.[20] The office also concluded that if a Bhopal-type release happened here as the result of criminally negligent or reckless conduct, those responsible could not be prosecuted under New York's environmental laws because the substance released into the environment would be considered a *product* — not a hazardous waste. It was clear that because the definition of hazardous waste was so narrowly drawn, much actual environmental endangerment was outside the scope of the criminal penalties offered by the federal RCRA statute or by New York's equivalent statute.[21]

To solve this dilemma, New York passed legislation criminalizing both environmental *and* human health threats caused by the release or possible release of any hazardous substance, whether or not it was a waste. This new offense, which is essentially an anti-pollution measure, was enacted in 1986. It covers a wide range of circumstances and provides a scale of penalties, from a class B misdemeanor to a class C felony punishable by a maximum of 15 years imprisonment.[22]

Soon after this statute took effect, two other improvements in New York's criminal laws followed. Based on changes in federal law, some of New York's water pollution crimes became felonies,[23] and New York also created a medical waste code, with stiff criminal penalties to punish unlawful handling and disposal of infectious waste.[24] The latter came in the wake of an epidemic of waste washing up on the shores of the beaches in New York and New Jersey, making the summer of 1988 a miserable one for would-be vacationers and summer businesses alike.[25]

20. *See* Abrams & Ward, *Prospects for Safer Communities: Emergency Response, Community Right to Know, and Prevention of Chemical Accidents*, 14 HARV. ENVTL. L. REV. 135 (1990).

21. The states' definition of hazardous waste was based on the federal definition. In 1986, when New York State's endangering statute was passed, a hazardous waste was, essentially, a solid waste that had been discarded or was about to be discarded, and which exhibited a characteristic of ignitability, corrosivity, reactivity, or a toxic leaching capability, or was a specified type of industrial waste, or a waste from a specified industrial process, or was found on a list of commercial chemical products in their pure or "off-spec" form. N.Y. COMP. CODES R. & REGS. tit. 6, pt. 371 (1988).

22. N.Y. ENVTL. CONSERV. LAW §§ 71-2710 to -2714 (McKinney Supp. 1991).

23. Water Quality Control Act of 1987, Pub. L. No. 100-4, 100 Stat. 88 (codified as amended in scattered sections of 33 U.S.C.); N.Y. ENVTL. CONSERV. LAW § 71-1933 (McKinney Supp. 1991).

24. N.Y. ENVTL. CONSERV. LAW art. 71, tit. 44 (McKinney Supp. 1991).

25. The public perception was that this was medical waste. In fact, sewer overflows were responsible for much more beach waste than actual illegal disposal of medical waste. N.Y. DEP'T OF ENVIRONMENTAL CONSERVATION, INVESTIGATION: SOURCES OF BEACH

II. ENVIRONMENTAL AND HEALTH HAZARDS IN THE WORKPLACE

In New York, workplace hazards have been placed within the scope of environmental criminal enforcement. The mishandling of hazardous substances has long been a problem in the workplace, where an estimated 50,000 to 70,000 Americans are killed every year by occupational disease.[26] In New York State, occupational disease has been estimated to be the fourth leading cause of death.[27]

In 1984, the Labor Bureau of the Attorney General's office brought civil proceedings under New York State's "Right-to-Know" law against a thermometer manufacturer in Brooklyn, New York — the Pymm Thermometer Company. City health studies had shown high levels of mercury in the urine of Pymm workers and their families. Based on facts discovered in that litigation, the Labor Bureau referred the matter in 1985 to the Attorney General's office's newly formed Environmental Crimes Unit. After a year-long investigation of conditions at the Pymm Company, conducted by the Unit, along with the Brooklyn District Attorney's office, a grand jury indicted the Pymm Company, its president, William Pymm, his brother and plant manager, Edward Pymm, and a foreman and an associated company, for reckless endangerment and assault, conspiracy and false filings.[28]

The victim of the assault was a former worker, Vidal Rodriguez, who had suffered permanent brain damage from mercury exposure. Mr. Rodriguez had been a maintenance worker who was then put to work in a secret basement room reclaiming mercury from broken thermometers. Even though he was regularly

WASHUPS IN 1988 41-42 (Dec. 1988). Nevertheless, medical waste had been proven to be a source of illegal activity in the garbage industry. In New York, the Attorney General's office had brought two felony prosecutions for medical waste dumping, relying on other statutes to penalize related conduct because the medical waste itself was treated merely as regular solid waste. For example, false filings related to false applications for transporter permits were charged.

26. NATIONAL SAFE WORKPLACE INST., ENDING LEGALIZED WORKPLACE HOMICIDE . . . BARRIERS TO JOB SAFETY PROSECUTION IN THE U.S. 1 (July 15, 1988) (citing testimony by Dr. Philip Landrigan, M.D., Mount Sinai School of Medicine, before the Committee on Labor and Human Resources, U.S. Senate, April 18, 1988).

27. DEP'T. OF COMMUNITY MEDICINE, MOUNT SINAI SCHOOL OF MEDICINE, OCCUPATIONAL DISEASE IN NEW YORK STATE: PROPOSAL FOR A STATEWIDE NETWORK OF OCCUPATIONAL DISEASE DIAGNOSIS AND PREVENTION CENTERS ii (Feb. 1987) (Report to the New York State Legislature).

28. People v. William Pymm, Edward Pymm, Thomas Daniels, Pymm Thermometer, Inc., and Pak-Glass Machinery Corp., No. 930/86 (N.Y. Sup. Ct. (Kings County) 1986).

breathing mercury vapors and carrying mercury droplets home on his clothes, he was given no protective clothing and no suitable respiratory protection. Over a 13-year period, New York State and federal Occupational Safety and Health Agency (OSHA) inspectors had told the Pymms of the dangers posed by mercury and had issued citations for breaches of federal occupational safety standards, including lack of proper ventilation mechanisms. The owners had taken no meaningful steps to remedy the conditions in the factory on behalf of the workers. An OSHA inspector did find, however, that the owners' own offices were separately enclosed and ventilated, giving them protection not available to their employees.[29]

After a month-long trial, the jury convicted all the defendants except the foreman on all charges.[30] The dangerous instrument with which Rodriquez had been assaulted[31] was mercury — a toxic substance as dangerous in its effects as any knife or gun. This is believed to be the first penal law conviction involving workplace exposure to toxic chemicals in New York State history.

A. *The Preemption Defense*

During the Pymm investigation prosecutors in other states were also bringing criminal charges against companies for injuring or killing workers by exposing them to hazardous substances or other dangerous conditions.[32] Prosecutors in Illinois, Wisconsin, Michigan and Texas were stepping into a void caused by the lack of federal enforcement in the occupational safety field. For a while, these cases and the Pymm case were derailed by the preemption defense. Defendants argued that under the Supremacy

29. *Id.*

30. *Id.*

31. A person is guilty of assault in the second degree when, "[h]e recklessly causes serious physical injury to another person by means of a deadly weapon or a dangerous instrument." N.Y. PENAL LAW § 120.05(4) (McKinney 1984).

32. The first such case was in Chicago — People v. Film Recovery Systems, No. 83C-11091 (Cook County Cir. Ct. June 15, 1985). After a bench trial, the judge convicted a Chicago company, Film Recovery Systems, its president, plant manager, and foreman of the murder of Stephan Golab, a worker whose job was to stir unventilated tanks of sodium cyanide and who went into convulsions and died on February 10, 1983. The three individuals were sentenced to twenty-five years' imprisonment and fined $10,000 each. The company was fined $24,000. On January 19, 1990, the Appellate Court of Illinois, First District, Fifth Division, held that the convictions were inconsistent for offenses requiring mutually exclusive mental states, and remanded for a new trial. People v. O'Neil, 194 Ill. App. 3d 79, 96, 550 N.E.2d 1090, 1101-02 (App. Ct. 1990).

Clause of the federal Constitution[33] state prosecutors were pre-empted from bringing such cases. Congress, it was said, had striven for uniform enforcement of safety standards in the workplace through the Occupational Safety and Health Act (OSH Act), and that scheme prohibited individual states from setting more stringent standards through criminal prosecutions.[34]

The judge in the Pymm case upheld Pymm's claim of preemption, overturning the jury's verdict of guilty on all counts. On appeal, the intermediate appellate court unanimously reversed the dismissal and reinstated the verdict.[35] Subsequently, New York's highest Court, the Court of Appeals, unanimously affirmed the Appellate Division.[36]

The Court of Appeals held first, that New York's general criminal laws are not occupational safety and health standards, which are the exclusive province of federal regulators;[37] and second, that the OSH Act does not expressly or by implication pre-empt New York from prosecuting conduct in the workplace that society as a whole deems unacceptable.[38] The court went on to say that if state prosecutors cause employers to pay stricter attention to OSHA standards, all the better: "This would be entirely consistent with the Occupational Safety and Health Act's self-proclaimed purpose of ensuring 'safe and healthful' conditions for American workers."[39]

On February 19, 1991, the United States Supreme Court denied Pymm's petition for a writ of certiorari.[40] Thus, New York

33. U.S. CONST. art. VI, § 2 (the Supremacy Clause) states: "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; . . . shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any . . . Laws of any State to the Contrary notwithstanding."

34. Section 18(a) of the Occupational Safety and Health Act, 29 U.S.C. § 667(a) (1988), provides: "Nothing in this chapter shall prevent any State agency or court from asserting jurisdiction under state law over any occupational safety and health issue with respect to which no standard is in effect under section 655 of this title."

35. People v. Pymm, 151 A.D.2d 133, 141, 546 N.Y.S.2d 871, 876 (App. Div. 1989).

36. People v. Pymm, 76 N.Y.2d 511, 515, 563 N.E.2d 1, 2, 561 N.Y.S.2d 687, 688 (1990).

37. *Pymm*, 76 N.Y.2d at 520-21, 563 N.E.2d at 5-6, 561 N.Y.S.2d at 691-92. The occupational safety and health standard set out at 29 C.F.R. § 1910.1000(b) (1990) provides that an employee's exposure to mercury in any 8-hour work shift of a 40-hour work week shall not exceed an 8-hour time weighted average limit of 0.1 milligram in a cubic meter of air.

38. *Pymm*, 76 N.Y.2d at 521-22, 563 N.E.2d at 6-7, 561 N.Y.S.2d 692-93.

39. *Pymm*, 76 N.Y.2d at 522-23, 563 N.E.2d at 7, 561 N.Y.S.2d at 693.

40. Pymm v. New York, 111 S. Ct. 958 (1991).

State's authority to prosecute what the Court of Appeals called "intolerable and morally repugnant"[41] behavior by employers remains untouched. The preemption argument now appears to have been put to rest. After setbacks at the intermediate appellate level, the final state courts of appeal in Illinois, Michigan and Texas have likewise joined New York in holding that state prosecutors are not preempted from using their general criminal laws to punish criminal conduct in the workplace.[42]

B. *Federal Recognition of the Relationship Between the Environment and the Workplace*

State prosecutors are not alone in linking environmental crimes and occupational safety. The idea that environmental crimes can involve injuries to workers has been incorporated in recent federal statutes as well. The crime of knowing endangerment — that is, placing another in imminent danger of death or serious bodily injury in the course of mishandling hazardous wastes or substances — is found in the 1980 version of RCRA.[43] This concept was also introduced into the Clean Water Act in 1987[44] and the newly amended Clean Air Act passed in November 1990.[45] These statutes quite clearly contemplate that employees may be potential victims of environmental crimes.[46]

The first conviction under RCRA for knowing endangerment was of Protex Industries, in November 1987. Protex was convicted of unlawful disposal of hazardous wastes from its concrete manufacturing process and drum recycling operations, and for

41. *Pymm*, 76 N.Y. 2d at 521, 563 N.E.2d at 6, 561 N.Y.S.2d at 692.

42. People v. Chicago Magnet Wire Corp., 126 Ill. 2d 356, 373, 534 N.E.2d 962, 970 (1989); People v. Hegedus, 432 Mich. 598, 601-02, 443 N.W.2d 127, 128 (1989); Sabine Consol., Inc. v. Tex., 806 S.W.2d 553 (1991).

43. 42 U.S.C. § 6928(e) (1988).

44. 33 U.S.C.A. § 1319(c)(3) (West Supp. 1991).

45. 42 U.S.C.A. 7413(c)(4), (5) (West Supp. 1991).

46. *E.g.*, 42 U.S.C. § 6928(f)(3)(A) (1988). The legislative history of the RCRA amendment introducing this provision states:

> this defense [that the person injured consented to the conduct charged] simply reflects the fact that working in or with the hazardous waste industry involves some hazards that are unavoidable. So long as the person endangered is aware of the existence of a hazard and voluntarily assumes the risk, there should be no criminal liability under the endangerment provision attached to the person responsible for the dangerous condition.

H.R. CONF. REP. No. 96-1444, 96th Cong., 2d Sess. 40, *reprinted in* 1980 U.S. CODE CONG. & ADMIN. NEWS 5028, 5039. The key to this defense is, of course, the worker's *knowledge* of the hazard and *assumption* of the risk.

knowingly endangering its employees who suffered severe injuries as a result of repeated exposure to solvents.[47] The employees' symptoms were similar to those suffered by Vidal Rodriguez in the Pymm Thermometer case, which included permanent memory impairment and depression. The conviction has been upheld on appeal.[48]

The Environmental Protection Agency and OSHA have also recently recognized the link between environmental crimes and workplace safety. On November 23, 1990, the two agencies agreed to conduct joint training and joint investigations, informing each other of any pertinent violations they discover.[49] OSHA will also encourage states with their own equivalents to OSHA to work cooperatively with EPA and state environmental agencies.

III. OTHER DEVELOPMENTS AND TRENDS IN ENFORCEMENT

Environmental prosecutors believed in the mid-eighties that their case loads would consist of midnight dumpers and fly-by-night hazardous waste operators out to make a quick profit. While New York still prosecutes such cases, present day investigations also include some Major Fortune 500 companies whose shortcuts with toxic chemicals caused pollution. Extremely hazardous substances which can cause injury, death, and environmental devastation must be handled with the utmost standard of care. Most responsible companies now understand this and strive to reduce the risks.

The Attorney General's office no longer excuses sloppy practices as accidents.[50] Investigations of serious pollution incidents focus on whether there was a corporate decision to let things slide, postpone maintenance, ignore warnings, or delay capital programs, and whether these decisions amounted to a culpable

47. United States v. Protex Indus., Inc., No. 87-CR-115 (D. Colo. Dec. 21, 1987).

48. United States v. Protex Indus., Inc., 874 F.2d 740 (10th Cir. 1989).

49. Memorandum of Understanding between the U.S. Department of Labor, Occupational, Safety and Health Administration, and the U.S. Environmental Protection Agency, Office of Enforcement (Nov. 23, 1990).

50. A federal appellate court has succinctly commented on sloppy practices:

> Defendants assert there was insufficient evidence that management of the [extremely hazardous] chemicals was an environmental crime, because " 'Sloppy' storage procedures is [sic] not a crime." They are simply wrong. Negligent and inept storage of hazardous wastes is one of the evils RCRA was designed to prevent, and [the statute] makes such egregious conduct a crime.

United States v. Dee, 912 F.2d 741, 747 (4th Cir. 1990).

mental state of criminal negligence or recklessness. In such cases, the Attorney General's office will present the evidence to a grand jury. Individual decision-makers within the corporate hierarchy are included in the scope of investigations.

The greater sophistication of large companies which are now often targets of environmental criminal investigations has resulted in more sophisticated defenses: federal statutes have been scrutinized for their "preemptive" effect; writs of prohibition have been sought by defendants in pre-trial motion practice to prohibit further prosecution; and the defense bar has developed new tactics to delay and obstruct grand juries.[51]

On the other hand, some of New York's largest industrial companies are voluntarily undertaking a number of initiatives which seek to prevent pollution and allow the companies to operate more safely. For example, they are replacing obsolete plant and equipment, substituting less toxic chemicals, taking steps to enclose storage tanks and pipes to prevent leaks, reducing the amounts of hazardous wastes that have to be disposed of, and improving their maintenance of equipment. These companies are saving money[52] as well as protecting the environment.

Looking to the future, it is certain that state and federal authorities will increasingly cooperate in their prosecutions. The New York Attorney General's office has worked closely with the FBI and federal prosecutors in some very substantial joint investigations in the past year. The relationship has been excellent.

While state and federal prosecutors continue to concentrate on innovative applications of criminal law in complex circumstances, the time is ripe for legislative consideration of new criminal laws and further enhancement of some existing ones. New environmental criminal legislation must address the criminal activity that has resulted from a heightened awareness of the solid waste crisis. As the nation prohibits environmentally unsound methods of garbage disposal and disposal becomes more difficult, unscrupulous people in the waste industry have resorted to indiscriminate dumping. Throughout the northeast, communities have been afflicted overnight with makeshift garbage dumps, often masquer-

51. *See generally* Muchnicki & Coval, *Countering Corporate Obstruction in the Investigation and Prosecution of Environmental Crime*, NAT'L ENVTL. ENFORCEMENT J. (Nat'l A. of Attorneys General), July 1986, at 3.

52. *See generally* SAROKIN, MUIR, MILLER & SPERBER, INFORM, CUTTING CHEMICAL WASTES (1985).

ading as loosely regulated construction and demolition debris sites.[53] Use of the criminal law to combat this menace has been difficult because penalties are low and loopholes remain in the underlying regulatory structure.

New York's environmental criminal laws are sure to undergo other changes, particularly as we learn more about the effects of toxic chemicals and how industry can take steps to mitigate those effects. New developments in environmental science, toxicology, and technology will raise standards of safety and the benchmark of care which must be maintained. The guiding principle must be that as pollution control technology improves, and knowledge of hazards increases, companies and individuals have an increasing responsibility to use this knowledge to protect the environment, employees, neighbors — whatever and whomever could be contaminated.

CONCLUSION

Environmental prosecutors have a critical opportunity to alter indifferent corporate and individual behavior as it relates to the release and dumping of toxic chemicals into the environment. Traditionally, criminal law seeks to punish and rehabilitate the offender and deter others from committing similar acts. Tough but responsible enforcement of the criminal law in this context may persuade those who generate or handle hazardous wastes and substances that it is just not worth the risk to take short-cuts in handling and disposal procedures, and may also cause industry to look to the future and take timely preventive measures, thus reducing the risk of future Bhopals. Environmental prosecutors can thus play their part in the global efforts to protect the irreplaceable resources of our fragile planet.[54]

53. *See, e.g.*, Byron, *There Goes the Neighborhood*, NEW YORK, Jan. 15, 1990, at 35; *Mafia Said to be Seeking New Trash Sites*, N. Y. Times, Nov. 11, 1989, at B1, col. 3. On May 1, 1991, the New York Attorney General's Office filed a civil suit under the federal Racketeer Influenced and Corruption Organization Act ("RICO"). The defendants are Vermont-based trash haulers who are accused of widespread, illegal garbage dumping in New York State. New York v. Ryan Express Co., No. 91-CV-0476 (N.D.N.Y. May 1, 1991).

54. In a comparatively early environmental prosecution, a federal judge, Judge Allen of the Western District of Kentucky, justified imposing a two-year prison sentence with these oft-quoted words:

> If the reckless disposal of pollutants is allowed to continue unchecked, it is this Court's fear that irreparable damage to our planet will result. Contamination will result in the eventual and predictable disappearance of visual land, water, and other

natural resources, causing an ecological imbalance which could result in the death of our world as we know it.

The Court considered at length the question of probation as against imprisonments. . . . It was and is the opinion of this court that businessmen and industries who pollute our environment are guilty of grave crimes against man, nature and themselves. . . . Such crimes, if allowed to continue, will soon reach the point where either effects are irreversible by any known technology. . . .

United States v. Distler, No. 77-00108-L (W.D. Ky. Sept. 14, 1979).