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Criminal Prosecutions in Environmental Law: A Study of the "Kepone" Case

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INTRODUCTION

The effectiveness of criminal prosecutions in the environmental law area is often disparaged.[1] Some commentators suggest that corporate behavior is not significantly affected by criminal convictions because fines that are adequate to deter individual pollutors often have little impact on multi-million dollar corporations.[2] Such a contention, however is challenged by the history surrounding the prosecution of the Allied Chemical Corporation for the pollution caused by the pesticide Kepone. The successful prosecution of the Kepone case dramatically altered Allied's corporate behavior had a significant impact on legislative and administrative inspection schemes, and led to the establishment of an endowment for improvement of the environment.

Federal District Judge Robert R. Merhige, Jr., presided over a number of criminal cases and civil suits arising from the Kepone

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1. *See, e.g.*, Coffee, *"No Soul to Damn, No Body to Kick": An Unscandalized Inquiry into the Problem of Corporate Punishment*, 79 MICH. L. REV. 386, 386-87 (1981) (Professor Coffee takes issue with the longstanding belief that moderate fines do not deter, while severe penalties flow through the corporate shell and fall on the relatively blameless"); Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L. J. 857 864-65 (1984) ("lucrative business projects of borderline legality may be worth the wager to the firm even though they impose legal risks on managers").

2. The potential inadequacy of $500,000 fine is illustrated in the following hypothetical:

> Consider, for example, risk-neutral corporation presented with an opportunity to procure by bribery government contract that will bring in profit of $50,000. If the firm perceives ten percent risk of conviction, it will assign penalty of $50,000 discounted or expected value of $5,000. Only penalty in excess of $500,000 will certainly deter profit-maximizing corporation; any lower penalty leaves positive net expected gain.

Note, *Criminal Sentences for Corporations: Alternative Fining Mechanisms*, 73 CALIF L. REV. 443, 447 (1985).

incident.[3] Judge Merhige s handling of the Kepone case and his creative use of sentencing stand as a model for future prosecutions of environmental pollutors.

THE KEPONE CASE

The widespread pollution caused by the pesticide Kepone (pronounced "Key-pone") constituted the largest environmental disaster of the times, resulting in unparalleled criminal violations of federal anti-pollution laws. Allied Chemical Company and associated defendants were indicted on almost eleven hundred criminal charges subjecting them to maximum fines of thirty-two million dollars and possible imprisonment totalling over three hundred years.[4] On the civil side, suits were filed alleging more than two hundred million dollars in Kepone related damages. A separate class-action suit, brought on behalf of some ten thousand fisher men and others in marine-related businesses, claimed a lusty $8.5 billion. Adding insult to injury a group of stockholders sued Allied's Board of Directors, claiming that the Board had violated its responsibilities in its handling of the Kepone matter

Aside from the monetary damage, the despoiling of the environment was shocking. An Environmental Protection Agency study found traces of the pesticide Kepone in fish and shellfish as far as sixty-five miles from the Allied Chemical plant.[5] Fishing and crabbing were banned from Richmond, Virginia to the Chesapeake Bay amid speculation that the entire Bay might be contaminated. As Judge Robert R. Merhige, Jr would observe: "It is frightening to think how close we came to losing the Bay as one of our great natural resources. It is also disheartening to view how derelict government officials were in allowing this disaster to unfold."[6] The government's neglect was most apparent in the failure of an air-pollution monitoring station located some two hundred yards from the Kepone plant. The monitoring station had collected enough data to indicate excessive amounts of Ke-

3. Excerpted in this article is chapter from forthcoming biography which pays tribute to Judge Merhige and provides look behind the scenes of his landmark decision.

4. *See, e.g.*, United States v. Allied Chemical Corp., 420 F Supp. 122 (E.D. Va. 1976).

5. Brown, *Kepone Hearings, New Law Lindek*, Richmond Times-Dispatch, Jan. 9, 1976, at A1, col. 7 The EPA study, issued December 16, 1975, was conducted by EPA Health Effects Research Laboratory.

6. Interview with the Honorable Robert R. Merhige, Jr., U. S. District Court Eastern District of Virginia, in Richmond, Virginia (July 16, 1986) [hereinafter Merhige interview].

pone were in the ambient air; however the collected air samples were not analyzed until after the plant closed. Despite the many environmental laws passed in the 1960s and 1970s, state and federal authorities did not take action until it was too late—too late for the James River and its aquatic life which became contaminated with Kepone, too late for many fishermen and watermen who lost their livelihoods when the state banned the taking of fish and crabs from the James River and too late for company employees who became seriously ill when exposed to Kepone poisoning.

The roots of this tragedy date back to 1951 when Allied Chemical obtained its first patent to manufacture Kepone as a commercial pesticide. Kepone is a chlorinated hydrocarbon similar to DDT but with a distinctive molecular structure which made assessment of its nature more difficult. A small percentage of Kepone was used in this country as ant and roach bait, while most of it was shipped overseas as an agricultural pesticide. The federal Environmental Protection Agency had little familiarity with the environmental effects of Kepone because the pesticide was used mainly against the Colorado potato beetle in Europe, and in Latin American countries to control the banana root bore.

Kepone was initially produced from 1966 until 1973 by an Allied Chemical plant in Hopewell, Virginia, a blue collar town that called itself "the Chemical Capital of the South." However massive quantities of Kepone and the resulting widespread contamination were not produced until 1974 when Allied relinquished the manufacture of Kepone to a small company named Life Science Products, Inc. The Life Science company was born when Allied decided to convert its Hopewell plant to plastic production and consequently sought to spin off the manufacturing of Kepone to a smaller company exclusively devoted to production of the pesticide.

Two Allied employees, William P Moore, Jr., research director at the Allied Hopewell plant, and production supervisor Virgil A. Hundtofte, used their home and life insurance policies to secure a $175,000 loan and launch their venture as Life Science Products, Inc.[7] They immediately set up operation in a converted gas station within the shadow of Allied's Hopewell plant. Although Life

7 Eisman, *Allied Trial Offered Scenario of Kepone Pollution*, Richmond Times-Dispatch, Oct. 4, 1976, at B1, col. 5.

Science was charted as an independent corporation, it had a contractual commitment from Allied to finance installation of production equipment, supply raw materials, purchase the entire output of Kepone, and buy out Life Science, Inc. if the company was unable to continue operations. This contractual entanglement between Allied and Life Science presented one of the legal issues which Merhige had to resolve at the subsequent criminal trial. The prosecution argued that Life Science was a mere instrumentality of the Allied Chemical Corporation, thus making Allied legally responsible for all actions of Life Science, Inc.[8]

Life Science began the manufacture of Kepone in February 1974, and within a month serious problems developed. William R. Havens, supervisor of the Hopewell sewage treatment plant returned from a month s vacation to find the plant s digester inoperable. He noticed that "something that smelled odd was killing the bacteria the digester normally uses to break down waste materials."[9] Havens traced the smell back to the tiny Life Science plant, then took his problem to the city manager and city engineer Havens never learned what action they took, but the odd-smelling chemical kept flowing through his plant and into Bailey's Creek and the James River

By the fall of 1974 the State Water Control Board became aware of the problem at the Hopewell plant. A young investigator John Blair Reeves, was sent to meet with Life Science officials, who insisted that Kepone could be successfully filtered out of the plant s waste water Reeves remained skeptical and recommended to the Water Control Board that Life Science be limited to Kepone discharges of one hundred parts per billion in its waste water The Board directed Reeves to pressure Life Science into accepting this standard. However Reeves authority was undercut by the Board's concession that legal action could be taken against the city of Hopewell, but not against the Life Science plant. Reeves acknowledged that he was caught in the middle—"I got different advice from different lawyers," and he "sort of harassed" Moore and Hundtofte.[10] But the discharge of Kepone continued. The hassling and negotiating with Life Science continued right up to the plant s closing in July 1975.

8. *See infra* note 49 and accompanying text.

9. Eisman, *supra* note 7 at B1, col. 2.

10. *Id.* at B1, col. 4.

Throughout its existence, Life Science rarely met the Board's suggested standard of a discharge of about a pound of Kepone a day Even when Life Science sought to comply with the emission standard, faulty supervision resulted in frequent leaks, boil-overs, and other problems. On several occasions a full tank of Kepone had to be flushed, resulting in the discharge of a thousand pounds of the chemical at one time.[11] (The allowed discharge level was only about enough to cover a fingertip.)[12] Such discharges were equivalent to a chemical version of the atomic bomb, for commercial Kepone is diluted to 0.125% strength, while the Kepone discharged from the plant was 88 to 94% pure.[13] The excessive discharges were well known to city and state officials, but no strong steps were ever taken to prevent them. State, city and plant officials met in March, 1975 and raised the possibility of suspending plant operations until new pollution equipment could be installed.[14] There was no follow-through, however because Life Science owner Moore allegedly made veiled threats that once closed, the plant would never reopen. The threat to deprive Hopewell of a thriving business struck home to a city that had sought to attract industry by advertising its many local streams and rivers as "natural sewers" for industrial waste. Rather than deprive the city and state of a thriving business, the parties agreed to keep the plant running, while increasing efforts to meet the suggested emission standards. Even after this compromise, Life Science continued to exceed the standards.

H. D Howard, general manager of the Life Science plant, continued to allow excessive amounts of Kepone to flow into the city sewer on the assumption that there was "a tacit agreement" with the city and state to continue dumping as long as timely notice was given. Howard contacted the city sewage plant before each discharge and maintained that "he would never have allowed any discharge if the city had told him to stop it."[15] Sewage plant supervisor William R. Havens confirmed that he received such calls which dutifully reported the gallons of waste and the amount of

11. *Id.* at B1, col. 6.

12. Eisman, *Hundhofte Contradicts Self on Shipments From Allied*, Richmond Times-Dispatch, Sept. 29, 1976, at A1, col. 6.

13. Richmond Times-Dispatch, Jan. 27 1976, at B4, col. 1.

14. Eisman, *supra* note 7 at B4, col. 6.

15. *Id.*

Kepone they contained. Havens never told the plant not to make a discharge, because "I had no right to refuse them that I knew of."[16] When this scenario was reconstructed at trial, Merhige angrily declared: "It seems that everyone was sitting around on their couches. It sounds like a bunch of politics, everybody being nice to everybody else."[17]

The parties "being nice to each other" soon included Allied Chemical officials. Life Science informed Allied of the problems in controlling waste discharge, and officials of the two companies met in Hopewell on July 7 1975.[18] At the meeting Allied agreed to look into procuring additional pollution control equipment, but Allied continued to supply raw materials with knowledge of the existing pollution problem. By allowing Life Science to continue operations, Allied subjected itself to government charges that it had joined an ongoing conspiracy to pollute the environment.

When government and corporate officials failed to take strong action to control Kepone emissions, matters were brought to a head by employees of Life Science who were exposed to the pesticide on a daily basis. Kepone was made by combining five chemicals in a steel vessel and then putting the end product in a dryer to eliminate moisture. A thin film of this dried Kepone powder could be found throughout the plant. Raw materials and finished products were left lying on the floor making the Life Science plant a filthy place to work.[19] Employees exposed to this contaminated work place began to display physical symptoms: loss of equilibrium, memory and coordination; slurred speech; hearing difficulties; mental disorders; twitching eyes and hands; loss of body weight; impaired liver functions; and temporary sterility [20] All of these conditions are now known to be the effects of Kepone poisoning. At the time, however Moore assured the workers that

16. *Id.*

17 Eisman, *Allied Trial Offered Scenario of Kepone Pollution*, Richmond Times-Dispatch, Oct. 4, 1976, at B1, col. 1; *see* Jones, *Allied Motions Rejected, Judge Critical of Firm s Role*, Richmond News Leader, Sept. 30, 1976, A1, col. 3.

18. Eisman, *supra* note 7 at B4, col. 6.

19. Gordon, *Kepone: Chemical Remains Fact of Life for its Makers and Watermen*, Richmond Times-Dispatch, June 9, 1985, at D1, col. 3.

20. Brown, *Kepone Plaintiffs File Request*, Richmond Times-Dispatch, Dec. 31, 1975, at B1, col. 3; Orndoff, *Test Methods in Kepone Case are Complex*, Richmond Times-Dispatch, Jan. 11, 1976, at C1, col. 1; *see* interview with Joseph M. Spivey, III, private counsel, Hunton, Williams, Gay, and Gibson, in Richmond, Virginia (Aug. 12, 1986) [hereinafter Spivey interview].

Kepone could cause no harm to human beings. Both Moore and local physicians suggested that the employees' symptoms were caused by the stress of working sixteen hour shifts at the plant.

Interestingly enough, the only correct medical diagnosis was offered by a local veterinarian who treated a cat that developed shakes after sleeping on the work clothes of a Life Science worker Upon discovering that Kepone was a pesticide, the veterinarian advised the owner to keep the cat away from the Kepone and the shakes will "just go away "[21] The cat did recover but twenty-eight former employees and one spouse were eventually hospitalized.[22] The human tragedy of Kepone poisoning began to unfold with the solitary visit to a local physician by Dale F Gilbert, an operations supervisor at the Life Science plant. Gilbert's physician sent a blood sample to the United States Center for Disease Control, which found highly toxic levels of Kepone in Gilbert s blood. Within a week the state epidemiologist visited the Life Science plant and examined ten workers. Seven of them displayed symptoms similar to Gilbert. The next day under threat of a state order to shut down, Life Science agreed to close operations.[23]

While the immediate victims received medical treatment, the Environmental Protection Agency began an investigation of the scope of the environmental invasion of Kepone. The scientific investigation was hampered by the absence of existing methods for accurately determining relatively small concentrations of Kepone in air pollution monitoring filters, in soil, in water in seafood, and in other materials. The greater part of the six month study was devoted to developing, evaluating, and validating testing methods. Testing for minute fractional parts of Kepone, explained one of the state s laboratory chemists, "is like looking for a piece of a person in the world's population."[24] The tests re quired a great deal of skill, precision, and experience, not to mention considerable rechecking and validation. When accurate tests were finally developed, the test results indicated that the environmental distribution of Kepone extended well beyond Hopewell. Toxic levels of the chemical could be found in a wide sampling of

21. Spivey interview, *supra* note 20.

22. Brown, *supra* note 5, at A7 col. 1.

23. Gordon, *supra* note 19, at D1, col. 1.

24. Orndoff, *Test Methods in Kepone Case Are Complex*, Richmond Times-Dispatch, Jan. 11, 1976, at C1, col. 1.

soil, air water fish, and shellfish. The day after the Environmental Protection Agency released its findings, Virginia Governor Mills E. Godwin closed the James River to all fishing.[25]

The national publicity surrounding Kepone pollution also drew considerable attention from the federal government. Senate subcommittee investigations began in January 1976, and a House of Representatives committee held a public hearing in the Hopewell High School Auditorium.[26] The Congressional committees sought information on how to prevent the recurrence of such a disaster and also sought to fix the blame for the existing situation. Representative Dominick V Daniels, D-N.J., attached the blame to the federal Occupational Safety and Health Administration (OSHA), which had failed to take action on a Life Science employee s complaint filed some ten months before the plant closed. Had OSHA acted properly charged Daniels, "there is a strong possibility that the Kepone tragedy may have been averted."[27]

Senator James B. Allen, D-Ala., was particularly disturbed that federal regulatory agencies were remiss and that the Kepone incident came to light only because state agencies "blew the whistle" on the operation.[28] President Carter in a Norfolk campaign speech, charged Governor Godwin and Virginia Senator Harry F Byrd, Jr., with "doing nothing to solve the problem brought about by kepone. "[29] Godwin fired back: "I think it is reprehensible that any political candidate would try to capitalize on catastrophe and use human suffering in order to garner votes."[30] While political leaders continued the public debate, private citizens bore the day-to-day burden of the Kepone investigation. A twenty-three member federal grand jury was impaneled in Richmond and met for four months, hearing testimony from fifty witnesses and examining over five hundred documents.[31] On May 8, 1976, the grand jury handed down 1,094 criminal charges against

25. *Id.* at C1, col. 1.

26. Richmond Times-Dispatch, Jan. 27, 1976, at B4, col. 1.

27 *Id.*

28. Brown, *Not Expert, Hundhofte Asserts*, Richmond Times-Dispatch, Jan. 27 1976, at B1, col. 3; Brown, *supra* note 5, at A7 col. 5.

29. Robertson & Whitley, *Godwin Defends Virginia Kepone Action*, Richmond News Leader, Sept. 9, 1976, at A1, col. 6.

30. *Id.* at A1, col. 6.

31. Brown, *Allied, Hopewell, Others Named in 1,094 Counts*, Richmond Times-Dispatch, May 8, 1976, at A1, col. 4.

Allied Chemical, Life Science, their officers, and the City of Hopewell.[32]

Allied responded to the grand jury indictment by leveling its own charges against the government. In a press release issued within hours of the indictment, Allied contended that "[t]he scope of the criminal actions was unwarranted and unprecedented. The extreme reaction shown by the indictments appears to reflect official frustration over the failure of regulatory agencies to [do their proper job.]"[33] Allied soon found itself fighting not only the federal prosecutors, but also an important public re lations battle. The grand jury indictment consisted of the greatest number of criminal charges ever brought under the federal water pollution laws and the sheer magnitude of the numbers created national headlines. The CBS show "60 Minutes" ran a lengthy story on Kepone featuring an interview with Life Science owner Moore. Before a nationwide audience, Dan Rather confronted Moore with Allied's own "Blue Book" studies which disclosed that Kepone was known to cause cancer in laboratory animals. Moore was taken aback because Allied had never revealed those studies to anyone. The "60 Minutes" story left Allied and the City of Hopewell with a black eye, and shortly after the story city officials removed the signs that read, "Hopewell: Chemical Capital of the South."

Allied maintained that the Blue Books were wholly internal documents and insisted that the adverse publicity and the grand jury indictment were distortions of the facts. Allied particularly took issue with being portrayed as a callous polluter engaged in rampant despoiling of the environment. The grand jury had listed each day of discharge of Kepone as a separate charge in the indictment, thus a thousand separate counts of pollution related to a single pattern of production at one plant.[34] The greatest number of charges (940) related to the time period 1966 to 1974 when Allied itself manufactured the pesticide Kepone. The re-

32. *Id.*

33. *Charges Denied By Allied*, Richmond News Leader, May 8, 1976, at A4, col. 2.

34. *See, e.g.*, United States v. Allied Chemical Corp., 420 F Supp. 122 (E.D. Va. 1976). This proliferation of counts may no longer be possible after November 1, 1986, the effec tive date of 18 U.S.C. § 3572(b). The Code places ceiling, twice the maximum fine for the most serious offense, on the aggregate of fines court may impose for multiple offenses "that arise from common scheme or plan. This ceiling, however, applies only to offenses "that do not cause separable or distinguishable kinds of harms or damage. It is questionable whether each additional day toxic emission causes separate harm.

maining charges related to Allied's role as an aider and abettor and co-conspirator with Life Science, Inc. Also joined as co-conspirators were the City of Hopewell and four corporate officials at Allied's plastics and agricultural division plants in Hopewell.

Initially the alleged conspirators presented a united defense to the charges. The united front, however began to weaken as the individual defendants sought to strike favorable plea bargains with the government. The City of Hopewell pleaded no-contest to ten criminal counts and paid a $10,000 fine in return for dismissal of the remaining charges.[35] At later trials it became appar ent that Hopewell had been very negligent in allowing pollution to continue. Merhige now regrets that he imposed only a $10,000 fine. "If I knew then what I know now " he reflects, "I would not have been so lenient."[36] Following the Hopewell case, the technical superintendent of Allied's plastics division pleaded guilty to making a false statement concerning the discharge of Kepone to the Environmental Protection Agency and to the United States Army Corps of Engineers.[37] Soon afterward, the technical super intendent of Allied's agricultural division in Hopewell pled guilty to aiding and abetting the illegal discharge of Kepone.[38] In other bench trials, Merhige acquitted a number of low level Allied employees. He flipantly warned the prosecutors: "I ain t convicting the shnooks."[39] In a serious vein, he explained that those employees were products of a time when pollution was not part of the social consciousness. Lower level employees, who had never even heard of the Clean Water Act, were merely products of a time and atmosphere when people simply dumped their garbage in local streams. To Merhige, the responsibility for disposing of industrial waste lay with Allied's corporate hierarchy He would not permit the blame to be shifted to low level employees who merely carried out company policy

Alerted to Merhige s reluctance to punish lower echelon employees, the prosecutors focused upon Hundtofte and Moore, the co-owners of Life Science. Hundtofte pled guilty to conspiracy to

35. Richmond Times-Dispatch, June 9, 1985, at D2, col. 1.

36. Merhige interview, *supra* note 6.

37 Hoyle, *Allied Not Contesting 940 U.S. Charges*, Richmond Times-Dispatch, Aug. 20, 1976, at A1, col. 1; *Charges Denied By Allied*, *supra* note 33, at A1, col. 4; Brown, *supra* note 31.

38. Brown, *supra* note 31, at A1, col. 3.

39. Interview with trial participants; source not for attribution.

violate water pollution control laws, and no-contest to seventy-nine other misdemeanor counts.[40] The government accepted these pleas in return for Hundtofte s agreement to be a prosecution witness against Allied and the other defendants. Moore pleaded no-contest to one hundred and fifty-three pollution charges, but refused a government offer to drop half of the charges if he would confess to the conspiracy with Allied.[41] Moore s refusal to admit the conspiracy proved to be a key factor in Allied's defense strategy.[42]

Allied initially sought to have its trial removed from Merhige s jurisdiction because the extensive pretrial publicity was said to preclude impanelling an unbiased jury. In a related civil suit Mer hige asked the jury panel if anyone had heard or read about the Kepone "incident." Before he could be stopped, one juror arose and volunteered: "I read about it and I think that what Allied did was just terrible." Merhige called counsel to the bench and announced: "We are on our way to Elkins, West Virginia." Startled counsel could only ask: "Judge, where in God's name is that?" Merhige laughed: "That s why we are going there." The refer ence to Elkins has become a standard line with Merhige. Whenever he suggests to counsel that "we are going to Elkins," the lawyers know that it means a change of venue for the trial.[43]

In the criminal trial, however Allied ultimately decided to waive a jury and take its chances before Merhige sitting alone as the trier of fact. In another surprise move on August 19, 1976, the same day that Hundtofte pled guilty Allied pled no-contest to nine hundred forty counts involving the illegal discharge of Kepone and two other chemicals.[44] The decision to plead no-contest was made over the objection of Joseph M. Spivey III, the chief coordinator of Allied's defense team. Spivey had employed Murray J. Janus, Merhige s former law associate, as a criminal law specialist, and the two men prepared to dispute all of the government's charges. As Spivey and Janus discussed their trial strategy they received a phone call from Allied's corporate headquarters directing them to enter the plea immediately. Janus particularly felt that it was a bad decision because: "We could have plea bar

40. Hoyle, *supra* note 37 at A5, col. 4.
41. Spivey interview, *supra* note 20.
42. *See infra* note 60 and accompanying text.
43. Merhige interview, *supra* note 6.
44. Hoyle, *supra* note 37 at A1, col. 1.

gained and persuaded the government to drop at least half of the charges. But we were told to forget the legal maneuvering. Allied was losing the public relations battle and wanted to put an end to most of the controversy "[45]

While denying any responsibility for the criminal charges relating to the actions of Life Science, Allied reluctantly admitted its fault in making discharges during the early years when Allied itself was engaged in the manufacture of Kepone. The United States Attorney angrily requested that Merhige refuse to accept a plea of no-contest[46] which was equivalent to a guilty plea for purposes of the criminal trial, but could not be used as an admission of fault in pending civil suits. Simultaneously with the criminal charges, Allied was facing civil suits seeking over two hundred million dollars in damages caused by Kepone.[47] Allied thus sought to avoid any criminal admission that could harm its position in the civil suits. While Allied was concerned with its potential liability to private claimants, the prosecution was concerned with the public s right to review the details of the Kepone tragedy Citing "a great deal of public concern as well as a great deal of public confusion," the United States Attorney insisted that "the public has the right to a trial." The prosecutor was concerned that Allied officials "still have not come forward and admitted that they have committed a crime."[48]

Merhige accepted the no-contest plea while publicly announcing that he would regard it as the equivalent of a guilty plea. Allied's plea subjected it to maximum criminal fines of $13.24 million, which Merhige regarded as serious enough penalties independent of the potential civil damages. Merhige also pointed out that a public record would be made when Allied subsequently faced trial on the one hundred fifty-seven other pending criminal charges relating to Allied's responsibility for Kepone discharges made by Life Science, Inc.

At Allied's trial on those charges, the prosecution advanced two theories to hold Allied responsible for the Kepone emissions

45. Interview with Murray J. Janus, private counsel, Brenner, Baber & Janus, in Richmond, Virginia (May, 1986) [hereinafter Janus interview].

46. Hoyle, *supra* note 37

47 Eisman, *Kepone Litigation Growing Rapidly*, Richmond Times-Dispatch, Sept. 13, 1976, at B1, col. 5.

48. Jones, *Hearings to Help Fix Allied Fines*, Richmond News Leader, Aug. 20, 1976, at A3, col. 4-5.

made by Life Science. The first theory portrayed Life Science as a "mere instrumentality" of the Allied Corporation. Life Science s status as a dependent subsidiary was said to be embodied in a contractual agreement that provided for Allied to finance the purchase of production equipment, supply raw materials, purchase the entire output of Kepone, and buy out Life Science, Inc. if the company was unable to operate. Under this arrange ment, the prosecution argued that Life Science was merely another division of the giant Allied Chemical Corporation. Allied was said to hold ultimate authority over its subsidiaries and thus could not escape its corporate responsibility by establishing the facade of independent dummy corporations. Legal analogies were drawn to Merhige s earlier rulings in the Richmond school consolidation case which recognized that the State of Virginia could not delegate its desegregation responsibilities to political subdivisions.[49] Applying this theory of ultimate responsibility to the corporate sector Allied would not be permitted to delegate its pollution control responsibilities to corporate subdivisions. The Allied defense team countered this argument by maintaining that Life Science was at all times a separate and independent company which was not controlled by Allied Chemical.

At trial, the evidence of Life Science s independent status was confusing and contradictory Moore testified that Life Science was an "independent" company that sought business from other sources.[50] In response to questions from Merhige, however Moore admitted that the firm s only production work during its brief existence involved the manufacturing of Kepone for the Allied Corporation. Moore also described the relationship between Allied and Life Science as very close because "all the money we got came from Allied."[51] Merhige appeared skeptical, and Janus worried that the defense had lost on the issue of corporate independence.[52]

In order to keep the parties guessing and thus more willing to negotiate a settlement, Merhige often projects one image during trial, then issues a ruling diametrically opposed to the impression he created. This was one of those occasions. Much to the sur

49. Bradley v. School Board of Richmond, Virginia, 338 F Supp. 67 (E.D. Va. 1972).

50. Jones, *Witness Says Allied Alerted*, Richmond News Leader, Sept. 28, 1976, at A1, col. 3.

51. *Id.* at A4, col. 6.

52. Janus interview, *supra* note 45.

prise of courtroom observers, Merhige granted the defense motion to dismiss one hundred forty-four charges that Allied was responsible for illegal emissions made by Life Science, Inc.[53] Merhige likened Allied's responsibility to that of a prescription drug manufacturer who has a legal duty to warn physicians of the potential dangers of a drug. After that initial warning is given, further responsibility then rests with the physician to warn and inform others. Because Allied had notified Life Science of the nature of Kepone, Allied had no further duty to report to the Environmental Protection Agency or any other regulatory body Merhige concluded that the ultimate fault for the illegal discharges lay with Life Science, thus Allied could not be found guilty of criminal actions performed by Life Science.

The dismissal of one hundred and forty-four counts of the indictment left the prosecution with only nine viable criminal charges. These charges hinged upon a theory of conspiracy between Life Science and Allied. The government argued that on July 7 1975, Allied officials met and joined with Life Science coowners Moore and Hundtofte in an ongoing conspiracy to pollute the environment. At the meeting, Allied officials were informed that pollution standards were not being met and could not be met without additional pollution control equipment. Allied agreed to look into obtaining the necessary equipment, but did not order Life Science to cease production of Kepone. Life Science continued to make illegal discharges from July 7 until its closing on July 24, thus, according to the prosecution, Allied knowingly acquiesced in the illegal pollution of the James River[54] The defense denied that Allied had approved of further illegal discharges, and the question of exactly what had happened at the July 7th meeting was presented to Merhige.

The prosecution built its case on the testimony of Moore and Hundtofte, the former partners who were now at odds with each other They had struck different plea bargains with the government: Hundtofte confessed to the conspiracy charge, while Moore insisted that no conspiracy had ever existed. They also attempted to attribute the major share of the blame to each other Hundtofte testified that Moore "was in charge of the quality control operation,"[55] while Moore asserted that Hundtofte "called

53. *Id.*
54. *Id.*
55. Jones, *supra* note 50, at A4, col. 4.

the shots" in regard to Kepone production.[56] With respect to the Allied Corporation, Moore and Hundtofte contradicted not only each other but also their own earlier statements.

Testifying for the government, Hundtofte unhesitatingly stated that Allied continued to supply raw materials after the July 7th meeting. When pressed on cross-examination, Hundtofte admitted that he was not really sure if Allied had supplied any chemicals after July 7.[57] Moore was an even less convincing witness. On direct examination Moore testified that he had continuously informed Allied of the Life Science plant's failure to meet emission standards. Defense counsel Murray Janus then produced a letter Moore wrote in March 1975, in which he reported to Allied that Life Science was complying with federal environmental standards. When asked about the inconsistency Moore responded: "I've been interviewed by so many lawyers that if I don't tell something crossways I think I should get a medal."[58] Moore had in fact been forced to testify in many proceedings: before the Senate, the House of Representatives, the Grand Jury and in a number of depositions. Cross-examination was facilitated by Janus s cross-referencing of all the previous testimony "If Moore mentioned safety goggles," Janus explained, "I could flip to six previous statements on goggles. As often as not he had said six different things, all under oath. Cross-examination was a piece of cake."[59] On re-direct examination, Moore again changed his story to an assertion that he was "certain" that no decisions regarding water pollution were made without discussions with Allied officials. Moore, however retreated from this position when he affirmed that he had refused the government s offer to plea bargain to a conspiracy charge because, "I felt on my part there certainly was no conspiracy."[60] During another part of his six hour testimony Moore conceded that when informed of the pollution problem on July 7 Allied never suggested closing the Life Science plant. "Allied indicated that they needed the product," confessed Moore, "and Life Science certainly needed to produce it to stay in business."[61] Faced with such inconsistencies and con-

56. *Id.* col. 8.
57 Eisman, *supra* note 12, at A1, col. 7
58. Richmond News Leader, Sept. 28, 1976, at A4, col. 8.
59. Janus interview, *supra* note 45.
60. Jones, *supra* note 17 at A8, col. 1.
61. *Id.*

tradictions in the government s case, the defense asked Merhige to dismiss the conspiracy charges against Allied.

Merhige denied the motion because he felt that the government had made out a minimum prima facia case that Allied had participated in a conspiracy to violate water pollution laws. The government s case was admittedly weak, but not so weak that it could be thrown out of court on purely legal grounds. Merhige was further troubled by the conflicting testimony and by the legal question of who bore the responsibility for ordering Life Science to cease operations. Janus argued that responsibility for enforc ing pollution control requirements lay "where the pipe hits the water The City of Hopewell and the Environmental Protection Agency were responsible for monitoring discharges from the plant. Thus the responsibility for closing the plant should not be placed on Allied, which functioned merely as a customer of Life Science."[62] Merhige took the argument under advisement with the comment that: "Your theory Mr Janus, has occurred to the court."[63] Merhige, however did not wish to resolve the legal question until he had heard all of the evidence, thus he directed Janus to go forward with the defense case.

During an overnight recess, the Allied defense team debated whether to present the defense case or to waive the presentation of evidence and stake its chances for acquittal on the weakness of the prosecution s case.[64] The situation presented a dilemma familiar to criminal defense attorneys. An experienced defense counsel can sometimes discern when the prosecution has failed to prove its case beyond a reasonable doubt. In such instances it is shear folly to present defense evidence. Defense witnesses may be caught in inconsistencies or reveal previously undisclosed evidence. The prosecution can then use the defense witnesses to plug gaps in its case and thus prove the criminal charge based on evidence offered by the defense. On the other hand, the difficulty with waiving the presentation of evidence is that counsel can never be sure if the judge agrees that the prosecution has failed to prove its case. Absolute certainty in reading a judge s mind is impossible, particularly if the judge is Robert R. Merhige, Jr To waive the presentation of all defense evidence would mean a total

62. Janus interview, *supra* note 45.

63. *Id.*

64. Spivey Interview, *supra* note 21.

commitment to gambling on counsel's ability to read Merhige s current leanings.

The defense team was badly split over the question of waiving or presenting the defense evidence, if any Allied's in-house counsel argued to present all of the defense case, while associated counsel argued that no evidence should be introduced. The stalemate was broken late that night when Allied's president left the decision to Murray Janus—"We hired Murray as our criminal law specialist and we ve got to go with his judgment."[65] Janus based his decision on his ability to read Merhige s mind: "I felt that Merhige was leaning toward acquittal, but I also felt that he was looking for some help. He needed something more to hang his hat on. I decided to hedge our bets by offering just a very small part of the defense case. Not enough to give the prosecution any ammunition to use against us, but just enough to tip the scales and push Merhige toward an acquittal."[66] When the de fense opened its case, Janus called only two witnesses. Moore took the stand to reaffirm that Allied had expressed a desire that he continue operations, but he also testified that he did not feel that Allied had agreed to illegal discharges of Kepone. Moore s multiple inconsistencies had eroded his credibility as a witness, but the other defense witness offered devastating testimony Janus called to the witness stand an Allied official who attended the meeting with Moore and Hundtofte. The witness admitted that he left the July meeting with the understanding that Life Science could not meet discharge requirements while operating at capac ity However he also understood that the City of Hopewell had required Life Science to install three 20,000 gallon tanks to store Kepone waste prior to discharge. In the mind of the witness there was a clear understanding that the waste would be held in the tanks until properly treated. He vehemently asserted that: "There was no agreement to knowingly violate the law "[67] Janus thus argued that although Allied might have stopped the illegal discharges by refusing to supply raw materials or by refusing to accept delivery of Kepone, the legal responsibility to stop Life Science did not rest with Allied. While Janus conceded that Allied could have done more to stop the pollution, he vehemently

65. *Id.*

66. Janus interview, *supra* note 45.

67 *Id., see also* Eisman, *Kepone Case Conspiracy Not Proved,* Richmond Times-Dispatch, Oct. 1, 1976, at A1, col. 7

asserted that mere negligence was not sufficient to establish guilt of a criminal conspiracy

Faced with this strong denial from Allied, and unable to resolve the conflicting testimony of the government witnesses, Merhige cleared Allied of all responsibility for Life Science s illegal discharges of Kepone. Merhige concluded that there was "simply not sufficient evidence that Allied *knowingly* aided and abetted in the illegal discharges from the Life Science plant. The evidence leaves me with a reasonable doubt and I have no choice but to acquit the defendant Allied Chemical Corporation."[68] Merhige dutifully followed the constitution in affording Allied its presumption of innocence and its right to force the prosecution to establish guilt beyond a reasonable doubt. Merhige steadfastly refused to allow the public hysteria over Kepone to lead to a tainted conviction. The Allied defense team (a considerable group) was ecstatic over the acquittal and staged an all-night celebration at a prominent restaurant. The bill for the victory party was rumored to be the largest in the history of Richmond. The celebration paled, however when Merhige subsequently pointed to the pending sentencing hearings on Allied's no contest pleas, and announced: "When they are convicted they're going to know they ve been convicted."[69]

Although the legal maneuvering in the conspiracy case had temporarily overshadowed the human aspect of the Kepone tragedy Merhige s watchful eye had discerned the plight of the Ke pone victims. Almost forgotten at the conspiracy trial was the man who had started the Kepone investigation by sending his blood sample to the United States Center for Disease Control.[70] When Dale Gilbert appeared as a witness, his courtroom demeanor was a dramatic reminder of the human suffering caused by Kepone poisoning. Gilbert's unsteady walk to the witness stand revealed his disturbed equilibrium and his hands shook violently throughout his testimony The image of this broken man may have remained with Merhige when he sentenced Allied on the nine hundred forty charges to which Allied had earlier pleaded no-contest.

Merhige also heard disturbing accounts of Life Science s failure to protect its employees. A Life Science worker recalled that:

68. Janus interview, *supra* note 45.
69. Eisman, *supra* note 67 at A10, col. 4.
70. *See supra* text accompanying note 22.

"Nobody ever said this stuff was dangerous. I was told it was not harmful and you could eat the stuff and it's not going to hurt you."[71] The state epidemiologist described the employee s working conditions in the Life Science plant as incredibly lax and sloppy The Life Science plant was hot, steamy and covered with Kepone dust. The workers got the dust over their clothes and bodies, they inhaled it, and ate their lunches in it. When they went home, the Kepone contaminated their houses. The threat to the worker s families became apparent when Gilbert's wife was hospitalized for liver problems brought on by prolonged exposure to the Kepone dust brought into her home.[72] At one point in a related civil trial, Allied asked Merhige to order the workers to Duke University Hospital for tests, including surgery to determine the extent of their injury Merhige would not allow such "invasive surgery " but the workers were incensed that Allied had made such a request.[73] The workers were also bitter that Moore and Hundtofte had offered repeated assurances that the Kepone dust was harmless. One employee referred to Moore and Hundtofte as jerks and liers. "Nothing will ever change my mind that they knew the implications of this stuff," William A. Moyer Jr charged. "If I were to see one of those two guys again, I wouldn't be responsible for my actions."[74] Merhige could do little to directly aid the actual victims of Kepone poisoning because personal compensation of injured parties must be addressed by civil suits, not by criminal fines.[75] Merhige was also aware that the acquittal in the conspiracy trial had placed Allied in a strong bargaining position with respect to the civil litigation. Because of his ruling that the now defunct Life Science company was not in conspiracy with, nor a mere instumentality of Allied,

71. Gordon, *supra* note 19, at D1, col. 1.

72. *Id.* at col. 4.

73. Spivey interview, *supra* note 21.

74. Gordon, *supra* note 19, at D1, col. 4.

75. Under 18 U.S.C. § 3556, the court may order the defendant to "make restitution to any victim of the offense in accordance with the provisions of sections 3663 and 3664. Section 3663(b) provides that the court may order return of property or damages in the case of an offense "resulting in damage to or loss of or destruction of property of victim of the offense. *Query*: If Kepone contamination forced Chesapeake Bay fishermen out of business, were the fishermen "victims" and were their lost profits damages"? Can the sentencing process be converted into system for awarding compensation to victims without violating due process or eclipsing the defendant' constitutional right to jury trial? *See generally* Note, *The Unconstitutionality of the Victim and Witness Protection Act Under the Seventh Amendment*, 84 COLUM. L. REV. 1590 (1984).

there was little chance that the civil plaintiffs could recover damages from the Allied Corporation—the "deep pocket" in the civil cases.

Merhige's insight as to potential civil liability proved accurate when over $200 million in personal injury suits were settled out of court for a mere $3 million.[76] Allied agreed to this modest settlement because it had learned from the criminal trial that even successful litigation could be more expensive than the costs of a settlement. An expensive public opinion poll had been financed by Allied in support of its motion for a change of venue, and over a thousand witnesses scattered throughout the country had been interviewed and deposed for the criminal trial. Even the briefest deposition can run twenty pages, while those taken from potentially important witnesses can run several hundred pages. At that time, court reporters charged $60 per day to record testimony and an additional $1.75 for each page of testimony which was typed.[77] Such costs were considerable, but by far the largest expenses were the lawyers' fees, particularly in light of Allied's decision to employ a number of prestigious Richmond law firms. Fortune magazine characterized the Kepone litigation as "the biggest windfall to hit Virginia's legal industry since personal-injury suits were invented."[78] Murray J. Janus confirms that the legal fees were very substantial—"There were six lawyers and numerous para-legals working full time on that case for a year."[79] In light of the costs of defending against the criminal charges, settling the civil suits for $3 million was a substantial victory for Allied.

Allied's string of victories ended the day that Merhige imposed sentences for the nine hundred forty criminal pollution counts to which Allied had pleaded no-contest. Merhige grudgingly acknowledged that Allied had generally been "a good corporate citizen."[80] He refused, however, to be swayed by the company's argument that the dumping had been done innocently or inadvertently. Merhige imposed the maximum fine of $13.24 million in order to deter offenders everywhere. He announced his "hope after this sentence that every corporate official, every corporate

76. Richmond Times-Dispatch, June 9, 1985, at D2, col. 2.
77. Eisman, *supra* note 47 at B4, col. 6.
78. Zim, *Allied Chemical's $20 Million Ordeal with Kepone*, FORTUNE, Sept. 11, 1978, at 88.
79. Janus interview, *supra* note 45.
80. Merhige interview, *supra* note 6.

employee that has any reason to think pollution is going on, will think, if I don't do something about it now I am going to be out of a job tomorrow "[81]

Legal second-guessers speculated that Allied should have sought an out-of-court settlement rather than expose itself to Merhige s mercies. Janus admits, "we undervalued the case. This was the first case of this magnitude and nobody could assess it. Judge Merhige has a sincere belief in environmental protection, and I had to learn that the hard way Hell, when we were in prac tice together neither one of us could pronounce or spell environmental law No one could back then."[82] Janus was unaware that Merhige s environmental consciousness had been raised during his visits to Europe. While on his 1965 sabbatical to Spain, Mer hige had been impressed with the lovely clear waters off the south of France. Five years later he returned to the spot to find the waters contaminated with industrial pollution. Although Merhige maintains that "I wasn t looking to pick on Allied or anyone else, I was very concerned with what was happening to our environment."[83]

Allied did make a halfhearted attempt at negotiation, offering to settle the criminal case for $2 million in fines. However Justice Department officials regarded the offer as a cocky take-it-or-leave it proposal that left no room for additional negotiations. According to Justice Department sources, the government had been prepared to settle for about five or six million dollars.[84] On the defense side, Janus maintains that it was the Justice Department which failed to negotiate in good faith.[85] Janus also expresses disappointment in Merhige s sentence. "It s the only time I've ever been upset with Judge Merhige," bemoans Janus. "He s a conscientious judge who normally agonizes over sentencing. But this time I think he made up his mind before he ever heard the evidence in mitigation. We had obtained a very favorable probation report which Judge Merhige brushed aside as a snow job we had done on the probation officer Thirteen million dollars was the largest fine ever imposed at that time, and I think Judge Merhige paid too much attention to his place in history " "On the other

81. *Id., see generally* Richmond News Leader, Aug. 20, 1976 at A1 col. 1.
82. Janus interview, *supra* note 45.
83. Merhige interview, *supra* note 6.
84. Janus interview, *supra* note 45.
85. *Id.*

hand," Janus admits, "Judge Merhige did give us a fair shake on the conspiracy charge. His potential place in history didn't color his objectivity and he didn't hesitate one bit to enter an acquittal when the evidence was insufficient." "Still," Janus reflects, "I took the sentence personally because we worked so hard to show that Allied was a good corporate citizen. Judge Merhige just wouldn t listen. Hell, if he had knocked $100,000 off the maximum I could have at least felt that my hard work had saved Allied something."[86]

In typical fashion, Merhige handles the criticism with humor When introducing Janus at a Bar function, Merhige announced: "I made Murray famous. I gave *him* a place in history by hitting him with the largest criminal fine ever recorded. Although I'm not in the habit of explaining my decisions, I think you are entitled to know why I imposed that fine. I fined your client $13.24 million because the law would not permit me to fine them $13.24 milliion and one dollar "[87] In a serious vein, Merhige explains that the Kepone incident was "a sinful thing, because it was so indiscriminate in its injury I get upset when a criminal robs one citizen, but indiscriminate crimes like pollution or counterfeiting keep circulating and hurting more and more people. I believe in stiff penalties for such indiscriminate crimes."[88]

Although Merhige imposed the maximum penalty on Allied, he displayed his characteristic creativity in handling the case. Criminal fines are normally deposited with the federal treasury but Merhige sought to return some of the money to the citizens of Virginia who were the indirect victims of the poisoning of their environment. Merhige announced from the bench that he would "be interested in any legal method to keep that money in Virginia to help the people directly injured by Kepone."[89] Merhige s suggestion proved to be the genesis of the Virginia Environmental Endowment. He imposed the maximum fine of $13.24 million, but reduced the fine to $5 million contingent upon Allied's agreement to establish an $8 million endowment to improve the environment. Merhige s approach benefited the citizens of Virginia and the Allied Corporation which was able to take a tax deduction on the contribution, thus reducing the net cost of the trial's out-

86. *Id.*
87 Merhige interview, *supra* note 6.
88. *Id.*
89. *Id.*

come by $4 million. Neile Cotiaux, who won two national news awards for his coverage of the Kepone incident, regards Mer hige s sentence as a stroke of genius: "Creative law at its best, for the benefit of the people."[90]

The establishment of the eight million dollar Virginia Environment Endowment may provide long range benefits for the State of Virginia, but its immediate impact was to complicate resolution of the Kepone incident. The State of Virginia filed suit against Allied for the damage done by Kepone and for the costs of cleanup projects. Costs which were projected to run as high as $15 million.[91] The state demanded that Allied pay the full costs, while Allied insisted that the state government and the newly created Environment Endowment Fund bear a portion of the costs. The Endowment, however took the position that no funds would be released until the state and Allied had reached a final settle ment on cleanup costs.[92] Two years later the stalemate was finally broken when the state and Allied agreed that Allied would pay $5.25 million for Kepone related damages, while the state would accept a three year moratorium on its suits to recover the costs of the Kepone cleanup.[93] This payment to the state brought to more than $20 million the amount that Allied had paid in connection with Kepone contamination. In addition to the $5.25 million settlement with the state, Allied contributed $8 million to found the Virginia Environmental Endowment, paid $3 million in settlements with former employees, and also had to pay the $5 million fine levied by Merhige. When legal expenses are added in, Kepone connected damages are estimated to have cost Allied well over $30 million.

90. Interview with Neile Cotiaux, former news reporter in Richmond, Virginia (May 14, 1986). The propriety of corporate penance through judicially mandated charitable awards is still being debated by the courts. *See, e.g.*, United States v. Wright Contracting Co., 728 F.2d 648 (4th Cir. 1984) (reversing charitable contribution on government' appeal). U.S. attorneys often feel duty-bound to challenge such transfers from the government's coffers to the charity s. In the Kepone case, however, the prosecutor offered only token resistance to Merhige creative sentencing.

91. Eisman, *Allied Volumes Point to Awareness by Pair* Richmond Times-Dispatch, June 19, 1977 at C1, col. 4; Zim, *supra* note 78, at 90.

92. Hoyle, *Allied is to Pay State, Hopewell $5.2 Million*, Richmond Times-Dispatch, Oct. 14, 1977 at A1, col. 7

93. *Id.* at A1, col. 4.

POST-SCRIPT

Even when the financial costs are tallied, it is difficult to assess the final impact of the Kepone disaster The happiest part of the story is the extent to which the injured workers have been re turned to good health. Unlike most chemicals introduced into the body Kepone tends to recycle itself, slipping out of the intestines to return to the liver and work its way through the system again. In addition, the Medical College of Virginia discovered a drug which speeds the elimination of bile acids from the body and has been able to cut the average half-life of Kepone in the body from a hundred and sixty-five days to eighty days. As a result, all of the Life Science workers treated at the Medical College of Virginia have been virtually cured.[94] The short run medical effects of Kepone have been eliminated, although the long range spectre of cancer still hangs over the victims. Kepone has produced cancer in laboratory animals and its long run effect on humans is unknown.[95]

The long run effect on the environment is also unclear Ke pone is extremely persistent once it enters the environment, and is not easily broken down in nature. Some ten years after the last Kepone was made, fish and streams are still contaminated above safety levels set by the Federal Government.[96] Even though the Kepone level is dropping, this does not mean that it is disappear ing. Dr Michael E. Bender of the Virginia Institute of Marine Science explained that Kepone is an incredibly stubborn chemical, and it is just that the Kepone-laden sediments are being slowly buried by newer material settling on the river bottom.[97] A major disturbance, such as a hurricane, could stir up the sediments and send the Kepone levels higher The Kepone threat remains buried in river sediments, but dredging the river bottom is not a realistic solution. It could cost as much as $500 million to dredge the entire 200-square-mile area, and the dredging process might do more harm than good since it would stir up the toxic chemical. Kepone is likely to remain a problem in the Chesapeake Bay for decades.

94. Richmond Times-Dispatch, June 9, 1985, at D2, col. 1.
95. Gordon, *supra* note 19, at D1, col. 4.
96. Richmond Times-Dispatch, June 9, 1985, at D2, col. 1.
97 *Id.* at D2, col. 1.

On the plus side, there has been dramatic improvement in the environment immediately surrounding the former Life Science plant in Hopewell. A new regional sewage treatment plant has cleaned up Bailey s Creek and the James River where industrial wastes used to flow "You had to hold your nose when you went across Bailey s Creek before," observed Hopewell Mayor Hilda M. Traina. "Now we have people down there fishing."[98] In the corporate sector Allied Chemical Corporation moved to tighten its control of manufacturing. The company adopted a new incentive-compensation program downgrading profitability as a measure of a manager s performance and giving much greater weight to a regard for social and environmental responsibilities.[99] Corporate profits have also taken a back seat to Allied's concern for avoiding further problems with Kepone. The Company paid a West German firm 25 cents a pound to bury its Kepone supplies, at a time when the European price for a Kepone-derived pesticide had soared to $55 a pound. Fearing future problems, Allied simply refused to sell any more Kepone.[100]

Perhaps the biggest gain from the Kepone disaster is the public awareness of workplace hazards. Today's workers are more likely to complain and to be heard by regulatory agencies. The director of safety standards for the federal Occupational Safety and Health Administration recently observed that: "The Kepone incident probably had the greatest impact on the agency of any disaster that occurred, in terms of putting the 'H' in OSHA. Before Kepone, we were basically a safety agency "[101] There is, however less than universal praise for the federal government s heightened concern for employees welfare. Margaret Siminario, AFL CIO associate director for occupational safety and health, charged that the Reagan administration was destroying the regulatory process and turning back the clock to the pre-Kepone days.[102]

Whatever has happened at the federal level, the State of Virginia has taken strong steps to prevent another Kepone debacle. The State Bureau of Occupational Health has assumed sole re-

98. *Id.* at D2,col. 2.

99. *See* Zim, *supra* note 78, at 91.

100. *Id.* at 90.

101. Gordon, *Kepone Helped Bring Passage of New Laws*, Richmond Times-Dispatch, June 9, 1985, at D1, col. 2.

102. *Id.*

sponsibility for health inspections, and where there had previously been eleven inspectors, there are now thirty industrial hygienists and forty-two safety inspectors.[103] Many new laws and regulations have also been enacted to more closely monitor pollution. Faith in those new laws, however must be tempered with the pragmatism offered by Dr Robert B. Stroube, assistant commissioner of the Virginia Health Department. "The laws are in place to prevent another Kepone [incident], but there have been laws against murder for a long time, and people are still getting killed."[104]

103. *Id.*
104. *Id.* at D1, col. 1.