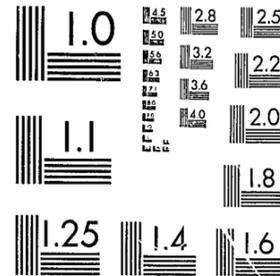


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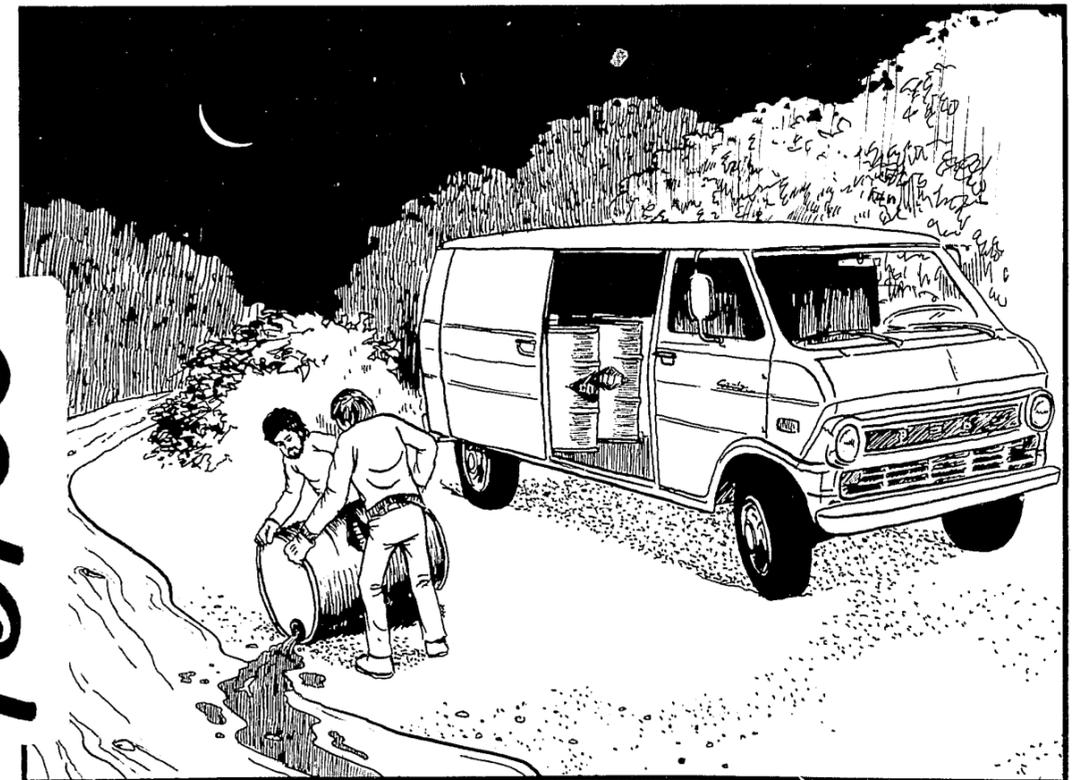


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WHITE COLLAR CRIME

FEBRUARY 1981

HAZARDOUS WASTE VIOLATIONS:

A GUIDE TO THEIR DETECTION, INVESTIGATION AND PROSECUTION



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OPERATIONAL GUIDE TO WHITE-COLLAR CRIME ENFORCEMENT

THE NATIONAL CENTER ON WHITE-COLLAR CRIME

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X
HAZARDOUS WASTE VIOLATIONS: A GUIDE TO THEIR
DETECTION, INVESTIGATION, AND PROSECUTION

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DETECTION, INVESTIGATION, AND PROSECUTION

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Michael M. Mustokoff

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FOREWORD AND ACKNOWLEDGEMENTS

This Operational Guide is one of a series developed by the National Center on White-Collar Crime as part of the Center's program of support services to agencies engaged in the prevention, detection, investigation, and prosecution of white-collar crime and related abuses. These Operational Guides are intended for use in actual law enforcement operations, as well as training, on the theory that the best training materials are those which most respond to the day-to-day needs of users who regularly practice their skills. This series evolved parallel with, and as a part of, the Center's preparation of a curriculum for training in the field of white-collar crime enforcement. Its authors are encouraged to express their own views and, as might be expected, different and even conflicting perceptions and approaches will be found among the National Center's Operational Guides and other publications.

Special mention should be made of the support and encouragement of James O. Golden, Director, and Stephen Cooley, Deputy Director, of the Criminal Conspiracies Division of the Office of Criminal Justice Programs, Law Enforcement Assistance Administration, and of Mr. Jay Marshall who is our LEAA Project Monitor. We also are grateful to Melvin Axilbund whose preliminary work on the subject of illegal dumping of toxic waste for the National Center did much to further this effort. Last, we gratefully acknowledge the invaluable support of members of the Battelle Law and Justice Study Center staff, and particularly that of Charleen Duitsman, Cheryl Osborn, and Ingrid McCormack, who typed our manuscripts, kept our files, and did all those things without which this series could not have been created.

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HAZARDOUS WASTE VIOLATIONS: A GUIDE TO THEIR
DETECTION, INVESTIGATION, AND PROSECUTION

I. INTRODUCTION

A. Statement of Purpose--An Overview of the Problem

The dangers revealed in the illegal manufacture, transportation, and disposal of hazardous waste materials have borne witness to crimes of severe and pervasive community impact. These crimes have, until recently, been ignored by state and local law enforcement agencies who have been unable or unwilling to deal with the obstacles attendant to their investigation and prosecution.

The problem is made even more complex by the existing scheme of state and federal regulation. Emphasis by the federal government on the monitoring of water and air pollution has provided both large loopholes and generous incentives for misuse of the land for hazardous waste disposal. In some instances, the result has been the creation and disposal of more concentrated toxic substances created as by-products of the required cleansing and pre-treatment processes. Concurrently the states, with few exceptions, have been slow in both the enactment and enforcement of federally mandated pollution standards. Where the states have taken an active role, as in New Jersey, they have been confronted with critical shortages of trained technicians and certified laboratory facilities.

We have reached a point as a society, however, where we can no longer tolerate toxic waste in our backyard. There is a recognition that government action must be taken immediately. Environmental Protection Agency (EPA) statistics which estimate that there are 270,000 separate generators and 10,000 carriers of hazardous waste have confirmed our worst fears concerning the magnitude of the problem as a potential health menace.

ABOUT THE AUTHOR

Mr. Mustokoff is currently engaged in the practice of law in Philadelphia with the law firm of Duane Morris and Hecksher. Until 1979 he was employed in the Philadelphia District Attorney's Office where he served as Chief of the Economic Crime Unit for four years. During his tenure in that office, Mr. Mustokoff was responsible for a variety of prosecutorial functions including supervisory responsibility for all major fraud investigations and prosecutions, for grand jury investigation of Medicaid fraud and boarding and nursing homes, and a major investigation of the School District of Philadelphia, Food Services Division. He is on the faculty of the Philadelphia College of Textiles and Science where he teaches courses on white-collar crime, substantive law and investigative techniques. Mr. Mustokoff received his Juris Doctor degree from the University of Pennsylvania Law School.

Law enforcement must grapple with hazardous waste on two fronts. The most obvious responsibility remains safeguarding the public health and safety. Yet the flouting of criminal laws protecting the environment must also be seen as an economic crime motivated by an unconscionable profit motive. It pays to illegally dispose of hazardous waste; so much so that EPA estimates that only 10 percent of this nation's annual output is properly managed. The profits to be made from illegal dumping are astronomical. Pharmaceutical companies typically pay as much as \$125 for the disposal of a single drum filled with bottles of waste chemicals.

Proper disposal requires a firm with sophisticated equipment and experts who will see to proper disposal bottle by bottle. More typically, the task is accomplished by inexperienced trash haulers.

To be effective, prosecution must reverse the economics of the crime, altering the risk-reward ratio so that it is once again "smart" and profitable to obey the law. It is on this second front that the war against hazardous waste will be won or lost.

The problems posed by hazardous waste are too numerous, complex, and diverse to ever be dealt with adequately by law enforcement alone. The criminal law is an awkward tool for such wide-ranging social reform. The police power must nevertheless be directed to a more central role in the regulatory scheme, so that it is viewed as something other than a mere lever to invoke civil remedies.

The purpose of the following pages is to set forth strategies and tactics for the detection, investigation, and prosecution of crimes arising from the handling of hazardous wastes. As in any successful plan for action, these strategies must utilize theories, methods, and skills that have stood the test of practical application. An attempt has been made to incorporate traditional weapons used successfully in the

prosecution of other white-collar crimes, and to show how they may also be used successfully against hazardous waste offenses.

B. Definitions

For purposes of this manual, "hazardous wastes" will be used as a generic term to describe what has been defined by the United States Congress in the Resource, Conservation, and Recovery Act:

The term "hazardous waste" means a solid waste,* or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may--

- (a) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
- (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

The Environmental Protection Agency has gone beyond mere definition to identify eight characteristics of hazardous waste: (1) ignitability; (2) corrosivity; (3) reactivity; (4) radioactivity; (5) infectiousness; (6) phyto-toxicity

* RCRA also defines solid waste:

The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act . . . or source, special nuclear, or byproduct material as defined by the Atomic Energy Act. . . .

(toxicity to plants); (7) teratogenicity (tending to cause developmental malformations); and (8) mutagenicity (tending to induce mutations or increase their frequency).

It is in the recognition of these characteristics that the investigator and prosecutor can first understand the absolute danger that hazardous waste presents to the public, as well as the difficulties of the prosecutive and investigative task. There are reliable and inexpensive tests available only for the first four characteristics which are recognized in the scientific community. Each investigation runs the risk of discovering a crime and criminal, yet falling short of prosecution because of the absence of available proof.

Hazardous waste is distinguished from industrial waste which is defined in general terms under most state statutes as any substance, not sewage, resulting from manufacturing or industry. It includes all substances whether or not they are generally characterized as wastes. (See e.g., "Industrial Waste," 35 Pennsylvania Statutes § 691.1.) The significance of this distinction is that under most state and federal regulatory schemes, it is sufficient for the prosecution to show the illegal dumping of almost any substance. To make out the common law crimes of public nuisance, risking catastrophe, etc., which are more difficult to prove, it is necessary for the state to demonstrate a danger to the public health and welfare for either commercial or domestic use.

Industrial wastes are also distinguished from pollutants which, like hazardous wastes, are understood in terms of contaminants likely to be injurious to health. It is significant that the statutory definition of hazardous waste is phrased in general terms of description and potential harm. There is no need to prove degree of toxicity and enter a battle of expert opinion.

C. Common Characteristics of the Crime

Most crimes involving hazardous waste have common characteristics which, once identified, imply guidelines for the investigator or prosecutor. The cases generally involve any combination of three points in the waste cycle: (1) generation--often as a by-product of legitimate industrial activity, for example the creation of corrosive sulfides in the refining of coal; (2) transportation--hauling of the waste from the industrial site; and (3) disposal. Disposal may be in the form of gaseous emissions or "dumping" in rivers, sewers, or on the land. Disposal may also take the form of storage. Most violations evolve from a business's need to dispose of waste created by its manufacturing process. Although proper means of disposal are available, they often represent costly processes which have, in the past, been successfully avoided.

Disposal may or may not be taken care of by the generator. The generator may seek to terminate his responsibility by contracting with a carrier service, not asking any questions. Once the waste has passed the factory gates, it has become the responsibility of another. Once the waste has left its point of origin, the case may become one of improper handling, storage, or disposal.

In some instances the described transactions take place in clandestine fashion, while in others the illegal handling of waste has become so widespread or longstanding an industry or company practice as to go on heedless of legal consequences. Thus dealings may be financed by cash placed in a paper bag, or documented by an internal memorandum if not voucher, receipt, and income tax deduction.

Most hazardous waste cases have civil as well as criminal implications. The need for abatement through injunction and repair of damage done to the environment are rarely absent as factors. Unfortunately, it is this same intermingling of criminal and civil considerations which sometimes leads courts away from viewing hazardous waste cases in terms of punishment

and deterrence as they seek to dispose of these matters by finding grounds for a "reasonable settlement" among the parties--a bias well known to prosecutors of white-collar crimes.

II. PATTERNS OF PROSECUTION

There are several distinct patterns of prosecution which may be undertaken in hazardous waste cases which can include: (1) specific environmental statutes carrying criminal penalties; (2) criminal statutory offenses generally dealing with the public health and welfare; (3) criminal statutory offenses dealing with data disclosure, fraud, and public corruption; (4) criminal conspiracy, solicitation, and aiding and abetting statutes; and (5) Racketeer Influenced and Corrupt Organization (RICO) statutes.

None of the patterns cited above should be considered mutually exclusive and are, in fact, actually more effective when used in combination. The distinctions noted here are for purposes of analysis only.

A. Environmental Offenses Carrying Criminal Penalties

At both the state and federal levels there now exists a substantial body of environmental law carrying criminal penalties. Many of these statutes have been enacted with a view toward the difficulties of prosecution, and hence allowances are made which are not found elsewhere in the criminal law. Thus, as alluded to earlier, one need only show industrial waste, as opposed to toxicity, in proving an environmental case.

Likewise, the environmental statutes minimize the degree of criminal intent necessary for conviction.

It is sufficient under most statutes to show that reasonable precautions were not taken to prevent an incident of illegal activity. If a discharge of

waste has taken place for which the defendant is responsible, a crime has been committed.

It is noteworthy that virtually every environmental statute provides for the prosecution of "any person," including an "individual," and in some instances "any responsible corporate officer." Moreover, these provisions have been successfully invoked. See, e.g., U.S. v. Frezzo Brothers, Inc., 602 F.2d 1123 (3rd Cir. 1979); U.S. v. Hamel, 551 F.2d 107 (6th Cir. 1977); U.S. vs. Ouellette, 11 ERC 1350 (1977).¹

The environmental statutes should be viewed as providing the framework for enforcement.² Since most carry both civil and criminal sanctions, they provide a frame of reference for decision making. Whether to seek civil remedy or criminal penalty depends on a variety of factors:

- The type of evidence most likely to lead to criminal prosecution should be that which would indicate that high corporate officials allowed an environmental offense to occur with full knowledge of the serious hazards likely to result.
- Consideration should focus on the willfulness of the action and nature of the harm.
- The extent of the risk to the public health must be clearly defined.
- The degree and nature of concealment of information from regulatory authority is another important factor.
- Previous citations for the same violation are unambiguous indications of criminal intent.
- Conversely, the willingness to repair damage caused by a single statutory infraction must be given weight.
- Thought must be given to specific and general deterrence. The effect of criminal prosecution on the target company must be weighed along with the effect on other potential violators.

Environmental statutes must also be seen as a possible spawning ground for a wide variety of criminal charges. Conspiracy, false reporting, bribery, and even

anti-racketeering statutes may be invoked. Tactical considerations weigh heavily for the marriage of charges under an environmental statute to a more traditional criminal offense. It is the experience of most prosecutors that an environmental offense taken by itself is often viewed by the courts in a much different light. There exists too strong an association with civil liability to mete out just criminal punishment. Finally, as any prosecutor familiar with plea negotiations knows, criminal charges are often the only bargaining tools available to the government.

B. Criminal Offenses Dealing with the Public Health and Welfare

Common law crimes against the public health have long been included among general criminal statutes. The Model Penal Code recognizes public nuisance, reckless endangerment to life, and risking a catastrophe as crimes. In weighing prosecution for these offenses, one must consider the problem of being bound by the rules of statutory construction which require that the charges brought must be the most specific governing the defendant's behavior. Where there is an overlap in charges, the lesser offense is always determinative. Yet as noted earlier, the elements of the crime present in the environmental offenses are rarely the same as the common law violations.

1. Public Nuisance. It is noteworthy that most state codes do not attempt to explain nuisance beyond the common law definition. (See, e.g., 18 Pennsylvania Statutes § 6504.) A review of the recent cases brought under nuisance statutes shows a disproportionate number to be pollution cases. (See 61 Am Jur 2d Pollution Control §§ 1et seq.; also see 47 ALR 3d 1224, 78 ALR 2d 1305.) The significance of the nuisance statutes to the prosecutor is that they provide the means not only to punish criminal behavior, but also to abate it, where under other circumstances there would have been no civil authority to seek an injunction.

Inherent in the crime of nuisance is misuse of property rights. At common law, nuisance could be found only where the defendant's misconduct resulted in unreasonable annoyance or inconvenience to the public. (See Wharton, Criminal Law and Procedure §§ 819-840 (1957). Nuisance is actually a concept in equity, therefore relief must be based on protection and prevention from improper invasions of the property rights of another. In the alternative, an owner is entitled to any use of property provided it does not prevent his neighbors from enjoying theirs.

2. Recklessly Endangering Another Person. Under the Model Penal Code,³ an attempt was made to prohibit generally any reckless conduct causing a serious threat to life or limb. The commentary to the code points out that the statute "does not require any particular person to actually be placed in danger, but deals with potential risks, as well as cases where a specific person is actually placed within the zone of danger."⁴

This attempt to consolidate the various statutory provisions penalizing reckless behavior has special adaptability to environmental offenses, where the immediacy of the harm is not known or where actual criminal intent is ambiguous. The statute is easily merged with environmental regulations carrying no criminal penalties. Under the Model Penal Code, the reckless endangerment of another's life is a misdemeanor of the second degree.

3. Risking a Catastrophe. This section of the Model Penal Code is ideally and specifically attached to serious environmental crimes causing or having the potential to cause great harm to property, as well as life.⁵ It is patterned after European laws dealing with activity creating a common danger.⁶

The crime is made a felony of the first degree if the criminal behavior is found to be knowing and intentional, a second degree felony if proven reckless. It is noteworthy

that, where there is a legal or contractual duty to take such measures, persons who fail to take reasonable steps to prevent or mitigate a catastrophe are also subject to criminal jeopardy. The statute is especially well suited for application to hazardous waste cases. Its penalty provisions are consistent with the potential dangers they are designed to deter.

A final cautionary note should be made in consideration of the prosecution of environmental crimes requiring a show of "recklessness." There is, in fact, a certain oversimplicity in merely defining reckless behavior as "being aware of substantial risk and disregarding it." There are a wide range of "endangerment" problems inherent in a technological society.⁷ Judge Bazelon of the District of Columbia Court of Appeals has written:

Ironically, scientific progress not only creates new risks but also uncovers previously unknown ones. As our understanding of the world grows exponentially, we are constantly learning that tart old activities once thought safe, in fact pose substantial risks. The question then is not whether we will have risk at all, but how much risk and from what source.

Although most prosecutors are not used to weighing philosophical questions concerning the costs of modernization, it is not meaningless talk best reserved for bull sessions. As pointed out by the unsuccessful prosecution of Ford Motor Company for known engineering defects in its Pinto automobile, the justifications for risk-taking do have an appeal that is not lost on juries. The industrialist's "common sense" approach must be anticipated and rebutted with hard fact. The truth is that society cannot allow itself to be poisoned in the name of progress. It is the prosecutor's task in a hazardous waste case to prove the imminence of the danger, and the investigator's task to supply the prosecutor with the evidence to make this possible.

C. Criminal Offenses Dealing with Fraud, Government Corruption, and Data Disclosure

To the extent that business activity affecting the environment is monitored by all levels of government, cases involving data disclosure, and even official corruption, are inevitable. The stakes are simply too high for matters to be otherwise. Commercial bribery and outright fraud, separate but related crimes, may also be routine in certain business settings.

The pursuit of these crimes in a program of hazardous waste law enforcement is important for two reasons. First, and most obvious, these crimes warrant prosecution no less because they occur in conjunction with hazardous waste offenses. Second, the universality of these crimes, the lack of scientific, and perhaps even philosophic understanding necessary to see guilt, make them much more acceptable to a fact finder charged with determining guilt beyond a reasonable doubt.

1. Tampering with Public Records - Data Disclosure.

Statutes penalizing the falsification, destruction, or concealment of public records are found in every jurisdiction. They are essential to any regulatory scheme which depends upon the routine disclosure of information. In the monitoring of hazardous wastes, such information can truly be a matter of life or death. As noted earlier, the failure to report or the false reporting of essential data to government agencies has often proved to be a much easier offense to "sell" to a jury than the crime under the pertinent regulatory scheme. A report containing false data may often be introduced without recourse to expert testimony or opinion.

Another advantage in the use of reporting statutes for purposes of criminal prosecution is that they provide an uncomplicated way of determining criminal acts and charges. Reporting violations, as will be noted elsewhere, are useful in extending the time limitations on a criminal episode. The

failure to disclose may be prosecuted long after the effect of a toxic emission has evaporated.

It is especially noteworthy that, where they reveal the existence of a conspiracy to defraud the government, the commencement of a criminal case may also be based on purely internal documents. On this theory, an agreement to withhold information is sufficient for criminal indictment.⁸

Reference should, of course, be made to the specific state statute. The Pennsylvania formulation of the Model Penal Code speaks in terms of tampering with "any record, document, or thing," thus permitting broad interpretation of the statute.

It should be emphasized that in the proposed amendments to the Federal Criminal Code (§ 1325 of S. 1722) it is not a defense to the crime of tampering that an official proceeding "was not pending or about to be instituted." Responsible investigation will have to sift through the heavy volume of routine document destruction taking place in the corporate setting.

The broader statutes make omissions from government records a crime. Thus in the case of Commonwealth v. Barger, Pa. Super., 375 A.2d 756 (1977), the record tampering statute was held to cover cases where Pennsylvania State Police had omitted information from accident reports concerning drinking by state troopers. In the recently brought case of U.S. v. Commonwealth Edison Co., C.D. Ill. Crim. No. 80-4002, the indictment charges that the defendants ordered security guards not to record that protective doors leading to the station's vital areas had been left unguarded.

In summary, the disclosure of complete and accurate data concerning hazardous waste is essential to the regulatory scheme. No hazardous waste prosecution should be undertaken without consideration of the possibility of record-keeping violations. The interrelationship of state manifest systems and data disclosure statutes will likely provide the most common theme for "hazardous waste" prosecutions.

2. Bribery and Theft. The fact that most illegal dumping is a clandestine operation makes it that much more enticing for the violator to make certain that heads are turned in the right direction when the criminal activity occurs. Bribery attendant to hazardous waste cases may take one of several forms. It may be an attempt to influence a government official in the performance of his or her duty, or it may take the form of commercial bribery in a private setting. Either form is likely to be of special interest in the prosecution of environmental crimes where the disposal of toxic wastes is likely to be considered an inconvenience that must be handled.

Although theft is a crime not usually associated with environmental crimes, theft by deception is likely to occur in false bidding situations. For example, a defendant hauler might claim that toxics will be dumped in an approved site, and agree to perform prescribed treatment on the waste, but be easily shown to have no facility, equipment, or experience necessary to accomplish such tasks. Theft and bribery charges should also be considered as a means of triggering the utilization of anti-racketeering statutes. The advantages of this tactic will be discussed in following pages.

D. Conspiracy and Conspiracy Statutes

At common law, conspiracy was a civil offense. It was not until the 19th century that the agreement to commit a crime became a separate indictable offense. Conspiracy charges are of special effectiveness in the corporate setting. Under the doctrine of vicarious criminal liability, each member of the conspiracy is liable for the crimes of any member of the conspiracy if such crimes were reasonably foreseeable.

Investigators and prosecutors of white-collar crime should be mindful that in some states an overt act is not necessary to prove the crime, the agreement itself being sufficient. The implication of this doctrine to the corporate board room is

clear--a combined decision to do an illegal act is sufficient for conviction.

In this context, it should be noted that under most modern formulations of the law, a conspiracy conviction does not merge with the completion of the intended crime. The mere act of organization is considered an object worthy of discouragement.

Another consideration in the use of conspiracy charges is the co-conspirator exception to the hearsay rule (see Federal Rules of Evidence, Section 801 (d) (2) (e), which admits the statements of one co-conspirator made in furtherance of the conspiracy against each of the participants.

Model Penal Code formulations of the conspiracy offense limit its use to situations where there is an agreement to commit an actual crime. In some jurisdictions it is still the law that a conspiracy may exist to do any malicious or unlawful act. This distinction is important where the hazardous waste activity under investigation is not in and of itself criminal.

Conspiracy charges extend, of course, to the separate but related crimes of aiding and abetting, misprison of a felony, and criminal solicitation. One point should be kept in mind with respect to prosecution of conspiracy charges in connection with hazardous waste cases. A significant problem is raised by the generator of wastes who delivers toxic materials for dumping "without knowing where the stuff will be taken." To be criminally liable, one must prove that the generator intended to facilitate the commission of a crime--in this case, illegal dumping. Absent specific statutory provisions, the generator of hazardous waste may claim to be no different from the person who sells sugar to a bootlegger. He has no interest in the outcome of the transaction other than to have unusable materials hauled away.

It is noteworthy that although permissive joinder of parties and offenses is usually considered a procedural point, the Model Penal Code does deal with the problem as a matter of substantive law. Joint prosecution is allowed where the

parties are charged with conspiring with one another, or where there are different parties but the conspiracies are so interrelated as to constitute different phases of the same organized criminal activity. This reflects the realities of organized crime. The most obvious benefit to law enforcement is conservation of resources by permitting one trial to set forth all aspects of a pattern of criminal activity. Such a presentation may be the only way that a jury can understand the role played by each of the participants in the crime.

A final note should be made about conspiracy as a continuous crime.⁹ In the seminal case of U.S. v. Kissel 218 U.S. 601 (1910), Justice Holmes stated:

The unlawful agreement satisfies the definition of the crime, but it does not exhaust it ... When the pact contemplates bringing to pass a continuous result that will not continue without the continuous cooperation of the conspirators or keep it up . . . it is a perversion of natural thought to call such cooperation a cinematographic series of distinct conspiracies rather than a single one.

Conspiracies can, of course, be terminated through the affirmative action of a participant. Although cases and jurisdictions differ as to what constitutes abandonment of a criminal scheme, the most commonly accepted test is the giving of notice that one no longer intends to participate. The purpose of this test is evidently to remove the encouragement of joint participation. Thus, for purposes of computing time limitations, the statute does not begin to run until a conspirator's notification to co-conspirators of his or her intention to terminate his or her role in the conspiracy.

E. RICO - Racketeer Influenced and Corrupt Organizations

In 1970, Congress passed, as Title IX of the Organized Crime Control Act, the Racketeer Influenced and Corrupt Organization (RICO) statute. It has been called the most sweeping criminal statute ever passed by the Congress. Although the Act did not create any new substantive crimes (in

the sense that acts which are punishable under RICO also are punishable under state and federal laws) it did designate certain crimes as racketeering activity. It made it illegal to acquire, maintain, or control any enterprise through a pattern of such activity ("activity" being defined as two or more acts of the designated crimes). Among the enumerated crimes are theft, commercial bribery, bribery of government officials, and perjury. RICO provided the model for a number of similar state statutes. (See e.g., 18 Pennsylvania Statutes § 911.)

In many instances at both the state and federal levels, the penalties imposed under RICO are much more severe than under the so-called predicate offenses. In addition, both state and federal RICO statutes provide for broad-based civil penalties patterned after the antitrust laws.¹⁰ For the prosecutor of hazardous waste cases, the message is clear; RICO may make available the combination of criminal and civil liability to adequately punish an offender, as well as divesting him of the benefits of his illegal activity.

Consistent with this approach, RICO departs from the traditional rule of narrow construction of criminal statutes to state "provisions of this title shall be liberally construed to effect its remedial purpose." The statute is not limited by any de minimus requirements regarding the number of persons, amount, or duration of the illegal activity. This may be extremely important in a hazardous waste case where time is of the essence in preventing further environmental damage.

At one time it was argued that utilization of RICO was to be restricted to "enterprises" organized for illegal purposes. This ambiguity was resolved in the case of U.S. v. Elliot, 571 F. 2d 880 (5th Cir 1978). In Elliot, the court stated the theory of the statute clearly, "There is no distinction for 'enterprise' purposes between a duly formed corporation that elects officers and holds annual meetings and an amoeba-like infrastructure that controls a secret criminal network."

Of special interest in hazardous waste cases is the relationship of RICO to statutes of limitation. Persons have been convicted under RICO for crimes on which the ordinary statute of limitation had run out. In U.S. vs. Fineman, 434 F. Supp. 189 E.D. Pa. 1977, the speaker of the Pennsylvania House of Representatives was charged with having accepted payments from parents in order to get their children into state-financed medical and veterinary schools. Fineman was convicted under RICO even though time limitations had expired on the predicate offenses of bribery and extortion. The same conclusion was reached in U.S. v. Revel, 493 F.2d 720 (5th Cir. 1974) where the court noted that a purpose of Congress in enacting RICO was to deal with the influence of organized criminal activity "in the economy, security, and general welfare of the entire country."

Under some state statutes, a violation of RICO is deemed to continue so long as the person who committed the violation continues to receive a benefit. (See e.g., 18 Purdon's Pennsylvania Statutes § 911(c).) Prosecutions under the federal statute are viable so long as the most recent racketeering activity occurred within five years prior to the indictment, and at least one other act occurred within ten years of the most recent.¹¹ Thus, the only real limitation on RICO appears to be one of due process. A prosecution cannot be brought for an offense committed so long ago as to render the accused unable to prepare a defense. Ex post facto prohibitions also provide a bar to prosecution where at least one predicate offense was not committed after the statute's enactment.¹²

The implications of RICO for the prosecution of hazardous waste cases are clear; where bribery, false pretenses, or any other pattern of predicate offenses have provided standing access to a dumping site, the period available for prosecution remains untolled.

The most interesting innovations provided by RICO, however, are its civil penalties and provision for discovery and civil

investigative demand. The courts are empowered to order an individual to divest himself of any interest in any enterprise. The court may place reasonable restrictions on future investments and activity or may order a dissolution or reorganization of an enterprise. In addition, the utilization of civil remedies imposes a lesser burden of proof upon the government.

The Court may enforce civil discovery through use of its contempt power. Using a state provision for civil investigative demand, local law enforcement may require "any person or enterprise to produce any documentary materials relevant to a racketeering investigation."¹³

The federal RICO statute provides for private treble damage actions by persons injured by racketeering activities. The possibility of class action suits filed on behalf of communities harmed by the criminal handling of hazardous wastes becomes very real. As an option for the public, and also for the private bar, RICO should be considered by the prosecutor strapped for resources.

F. Conclusion

Discussion of patterns of prosecution is useful as a blueprint of what is available for building hazardous waste cases. It provides the framework for detection and investigation. In a sense, however, such discussion is premature without first-hand knowledge of what is at hand and how it may be proved in court. The following pages are directed to those ends.

III. DETECTION OF HAZARDOUS WASTE CASES

In the last several years environmental catastrophes caused by the careless or even criminal handling of hazardous wastes have been the focus of increased public awareness. The resources of law enforcement and regulatory agencies have been

called upon to fashion a sophisticated response. Unfortunately, relatively little effort has been expended in developing better, as well as more routine, avenues of detection. Lost behind the headlines is the basic truth that today's disaster is yesterday's problem. Minor infractions have the potential to do irreparable harm to the land and to the life that it sustains. It is essential that law enforcement's strategy for hazardous waste prosecution provide for an early warning system.

A. Reactive Investigation

The detection process is usually divided into two types, reactive and proactive: the former indicating complaint response, the latter having to do with self-initiated inquiry. To date, nearly all hazardous waste investigations have been reactive. It is unlikely that this pattern will soon change. Law enforcement personnel see themselves as being too preoccupied with their daily case load to proactively create cases. The ideal enforcement program, however, should have three goals: (1) provide for routine detection of serious hazardous waste crimes, (2) improve reaction time; and (3) improve professionalism of response. It must be understood by all that, courtroom difficulties aside, hazardous waste offenses are not necessarily difficult to explain or to understand. The method of illegal disposal may be little more sophisticated than an unguarded sewer or an abandoned warehouse.

Relatively few resources have been devoted to proactive hazardous waste investigation. Yet it is only in the early identification of hazardous waste problems that the community can protect itself. Theories, practice, and methods of proactive detection must also be discussed and analyzed.

1. Agencies Having Environmental Concerns But Limited Law Enforcement Capability. Every state and virtually every metropolitan area possess administrative departments having

responsibility for land and water management, policing air pollution, and public health. The agents of these departments are in the field daily; reports are filed with them or their home office on a routine basis. Yet all the agents and all the information result in relatively few complaints of criminal activity, and even fewer criminal cases being brought. This is fatal to enforcement efforts. Illegal sewer or stream "off loading" of hazardous waste is the most frequent cause of a contaminated water supply. It is these inspectors who are most likely to know the source of the pollution.

There are several reasons frequently cited as explanations of this phenomenon: (1) corruption of inspectors; (2) over regulation; (3) agency history of ignoring all but the grossest violations; and (4) fear of loss and economic hardship in the community. Each reason must be analyzed separately if an effective strategy is to be developed.

Corruption is most often cited as the reason why the business practices of a regulated industry do not conform to administrative standards. It is noteworthy that of the aforementioned reasons, only corruption is directly related to the criminal law, thus reaffirming the belief that hazardous waste problems require much more than a prosecutor's response.

There is a certain logic to the charge. The economic burden of proper waste disposal does provide an incentive for graft. The reality, however, appears more mundane, if no more reassuring. The truth is that violators do not have to bribe officials to escape the net. For example, agency practices of conducting inspections to coincide with the yearly license expiration give sufficient advance notice of inspection. In many instances the scarcity of inspectors makes it unlikely that a violator will be discovered. In most hazardous waste situations, invisibility can be gained by the generator, hauler, and dump site without resort to contact with the regulating agency merely by the use of a clandestine operation relying on off-hour transfers and remote geography.

Where corruption does occur, it is most likely to happen on the "street" inspector level where the contact is made, where supervision is rare, and where the payoff is relatively small. This is not to say, however, that where public employees have discovered a lucrative scheme, it cannot be extremely profitable. The economic facts of life governing waste disposal dictate otherwise.¹⁴

Over-regulation is a common cause for administrative breakdown. Where there are so many rules that no firm is in complete compliance, regulators must assume too much discretion and they often have little confidence in doing so. Hazardous waste regulations have also suffered from conflicting state and federal standards.

A century's insensitivity to hazardous wastes has left indelible scars on both the regulated and the regulator. In New Jersey, site of the country's most vigorous hazardous waste prosecutions, the Attorney General's first case was brought as a result of assaults on inspectors attempting to gain access to a dump site. It was only after that incident occurred that law enforcement officials were made curious as to the underlying causes of the assault.

There must also be a reexamination of the tests currently performed by water management personnel. Unfortunately, most such tests deal primarily with the PH or acid level of the water. If the harmful substance being dumped has a neutral PH factor, as in the case of water having a heavy metal concentration, its presence remains undetected.

Another reason for past agency inactivity has been that land disposal sites are usually located in areas thought to have little or no value for other uses. The land's lack of economic value has resulted in only sporadic monitoring. The proximity of these sites to vital water supply systems has been lost in the bureaucratic shuffle. Thus, in Pennsylvania, where there are over 600 public-use dump sites, but state officials

estimate that there are as many as 4,000 private sites which are not under state control.

Another, and perhaps the most common, human reason for the failure of agency regulators to reach any but the most blatant environmental offenses is a desire simply not to "make waves." Regulator and regulated have worked together for so many years that the participants tend to see themselves as a partnership rather than in an adversarial posture.

Sluggish regulation of hazardous waste cases also reflects community pressures. Vigorous agency response may be met by industry complaints of competitive pressures and obsolete equipment which is too expensive to replace. Continued administrative prodding may yield threats of plant closure and loss of jobs.¹⁵

Although public sympathies may be predictable under these circumstances, the prosecutor and investigators have no choice but to press on. Public health, not to mention the fact and appearance of propriety, demand vigorous pursuit.

Effective enforcement requires nothing less than a reversal of attitudes, the simplification of standards, and the willingness to create a track record of prosecution.

2. Police and Fire Department Personnel. Police and fire department personnel have generally been especially cooperative in the enforcement of hazardous waste regulations and the detection of violations. One obvious reason for their interest is that improper storage of waste is a frequent cause of fires. Routine fire inspections of plant sites often include waste disposal and storage facilities. Abandoned properties are sometimes used by illegal dumpers as a point at which a city sewer supply may be entered. As public sensitivity to hazardous waste has increased, more complaints of illegal dumping have been directed to local police.

Another factor possibly affecting the reaction of police and firemen to hazardous waste is that because that particular hazard is not one confronted by them on a routine basis, it

still generates the same fears and interest that have aroused the general public.

Police and fire personnel should continue to be encouraged to come forward with complaints. To the extent that the information they provide cannot be acted upon, there should be an explanation of the reason for failure to go forward with a prosecution.

The need for inter-agency cooperation between prosecutor, police, and firemen is an important aspect of hazardous waste investigation. There must be an understanding of the distinctly separate role of the fire department in making routine inspections as opposed to conducting a criminal inquiry. Once a potential violator has been identified, there should be a set procedure outlining what steps are to be taken and by whom. The complex nature of hazardous waste investigations, and the difficulty of proving the elements of the crime demand something more than an ad hoc approach.

3. Development of Community Awareness. The portion of the public which is sensitive to the dangers of hazardous waste includes a broad spectrum of the community. The concerned homemaker whose water tastes "funny," the union officer responsible for worker safety, and the weekend naturalist may all be part of a detection network. It is the responsibility of the prosecutor to encourage these people to come forward with complaints or even questions. There must be a formal procedure for the processing of such civilian contacts. A log should be kept, each contact should be filed and numbered. Informants should be thanked and notified of final disposition of their information. Even after investigations, this information should be routinely culled and re-inspected for possible new violations. These practices are especially important in urban areas where illegal flushing of waste into municipal water supply systems is so common as to be beyond the capabilities of a water department.

Speeches to community groups are not enough. "Hot lines" should be employed. Prosecutions should be accompanied by a press release. Environmental groups should be encouraged in their surveillance of potential polluters.

B. Proactive Investigation

One would think that the dollar cost of hazardous waste to the public, exclusive of the dangers to public health and the threat to livestock and property, would provide a sufficient incentive for proactive investigation. Unfortunately, that has not been the case.

The Environmental Protection Agency estimates that it may cost as much as \$2 billion to clean up those hazardous wastes posing immediate dangers to the environment. Clean-up costs at Love Canal have exceeded \$27 million. There, area residents are seeking more than \$2 billion for personal injury and property damages. It is estimated that had the site been properly secured when closed, the total cost would have been \$4 million.¹⁶ In Philadelphia, a small, one-truck hauler was able to endanger the viability of the city's entire sludge disposal system through his daily "off loading" of sixteen barrels of waste.

1. Routine Audit of Regulatory Agencies. In October 1976, Congress passed the Resource Conservation and Recovery Act (RCRA). The legislation was intended to "eliminate the last remaining loophole in environmental law." Subtitle C of the Act requires EPA to devise state standards for the management of hazardous waste, including the implementation of record-keeping systems. Under RCRA, generators of waste are required to keep records of their waste, label waste containers, and initiate a manifest system to supply others in the waste disposal chain with information on the composition of the waste and to trace the movement of that waste from the generator to the final disposal site.¹⁷ The Act also requires EPA to set

standards for the transporters of waste, the owners of storage, disposal, and incinerator sites, and the issuance of licenses.

Although these regulations have not been implemented on the state level as quickly as had been hoped, there is now evidence that EPA is moving in that direction. In the meantime, many states have already enacted similar statutes. As a result, there is a growing body of routinely reported data available for the investigator and prosecutor of hazardous waste cases.

Under similar circumstances in the past, the vast amounts of information generated by reporting systems were not fully utilized. Law enforcement personnel employing reactive strategies used reports either to prosecute false reporting on the basis of an insider tip or to confirm an informant's lead. There was no attempt to incorporate the reporting system into a proactive enforcement strategy.

In the realm of hazardous waste, where regulatory violations appear longstanding and widespread, and each violation has the potential for devastating harm to the community, proactive investigation and the possibility of deterrence appears to be the only sensible course of action. Proactive enforcement of a reporting system should follow two lines of action. The first would be an audit of the disclosed data for possible danger to the community. Intelligence gathering methodologies and analysis should be employed. Matters of public health and safety, as well as the concerns of law enforcement, require this approach. It is necessary to chart patterns of disposal. For example, where is the waste going; to what effect; why is the waste going to a particular site?

The failure of the bureaucracy to conduct this basic function is critical. The failure to identify a hazard from submitted reports indicates behavior as negligent as any that the reporting system is intended to reveal. Newspaper revelations of hazardous waste regularly being hauled to disposal sites which have been designated inadequate disclose

an intolerable bureaucratic preoccupation with form over substance.

The second direction to be taken by proactive enforcement is the verification of submitted reports. Verification is necessary to guarantee the integrity of the reporting process. Non-filers must be identified and dealt with quickly, severely, and publicly. Selective audit based on a series of indicators is also necessary. Location, amount, methods of transportation, storage, and disposal of hazardous waste must be confirmed.

"Voluntary" adherence to a reporting system requires processes of verification and enforcement. As noted earlier, criminal prosecution alone cannot police an industry. The reporting process most commonly used is the manifest system. Its current vogue and the imminence of its implementation on the state level under RCRA make it worthy of extended analysis and discussion.

RCRA defines a "manifest"¹⁸ as "the form used for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage."¹⁹

The purpose of such a manifest system is to chart the movement of hazardous waste so that state agencies and the EPA can account for its transportation and treatment. Because the system requires generators to account for waste, it is hoped that it will encourage safe disposal. If a waste is of special concern or interest, its location can be determined immediately.²⁰

The state of New Jersey manifest form is typical of those currently in use. It is filled out first by the waste generator. The generator must identify himself, the pick-up location, and the hauler. The waste type, its physical state, and number of containers must also be reported. The form is signed off by the hauler and the operator of the facility.

Each form is numbered. The form is required to be sent to the state environmental agency the day following signature.

The manifest system as employed in New Jersey and elsewhere is vital to an enforcement program. It is not, however, a fail-safe process. In New Jersey, 70,000 forms are filed annually. Even with computerization, this volume goes virtually undigested. The system assumes, with no basis in fact, the legitimacy and honesty of the hauler. Although the system appears to focus on the generator, that generator is under no obligation to make certain that his waste actually arrives at its reported destination.

There is no system which allows one state to track chemical wastes that are generated in another. There are no duties or responsibilities placed on out-of-state storage sites. New Jersey authorities estimate that between 65-70 percent of their waste is now shipped across state borders to Pennsylvania.

Even under EPA's proposed regulations, many generators of hazardous waste are exempt from manifest requirements, meaning that there is no guarantee that the waste will be taken to an adequate site.²¹ The irony of the federal loophole is that it is the experience of most environmentalists that it is the firms which are exempt from regulation that are most likely to engage in illegal dumping.

A major problem in the manifest system has been the attainment of universal compliance. New Jersey investigators estimate that only 60 percent of all generators are filing reports. Although the manifest forms are numbered, there is no guarantee of sequential use. Forms concerning particularly toxic wastes tend to get "lost." Conspiracies between generator, hauler, and disposal site owner operate to completely mask certain shipments. As in other white-collar crimes involving data disclosure, the offense is rarely attempted without the cooperation of all stations in the reporting process.²²

A further complication involves the co-mingling of wastes. When the wastes are transferred from one transfer station with storage facilities to another, the identity of the waste is lost. "These transfer stations have become warehouses where drums of toxic liquids can be stored until they can be disposed of, usually in the least expensive way possible."²³

It should be noted that the manifest system realistically deals with certain phases of the waste generation and disposal cycle. Proposed regulations concerning the owners and operators of hazardous waste treatment storage and disposal facilities are in various stages of formulation awaiting implementation.

IV. INVESTIGATION

A. Nature of the Investigation

Hazardous waste cases are characterized by their inordinate demands on investigative time and resources. The New Jersey Hazardous Waste Strike Force estimates that a typical case involving a substantial generator/disposer requires 665 person-hours for development of probable cause and search warrant execution. Not included in this estimate are in-house analysis of the seized evidence, company records, grand jury preparation and presentation, as well as other legal proceedings.

A spectrum of experts and equipment not dreamed of in other matters is fundamental to hazardous waste investigations--helicopter surveillance, infrared photographic capability, safety breathing devices, etc. The cases involve extraordinary discipline and expertise in evidence gathering. A broken chain of evidence is likely to be fatal to successful prosecution. Sampling techniques must be precise beyond a reasonable doubt. At the same time, the investigation must be conducted in a safe manner.

The criminal investigation of hazardous waste handling cannot be undertaken lightly. Successful inquiry requires

painstaking planning and attention to detail. One false move in surveillance may alert a target and abort the investigation. The goal of the following pages is to set forth suggested investigative plans, and techniques for their execution.

B. Pre-Investigation Considerations

On receipt of a complaint of illegal handling of hazardous wastes, a number of key determinations must be made:

1. How reliable is the source of the complaint--what steps can be taken towards verification?
2. Is there an immediate danger to life or property, if so what steps should be taken?
3. What public or otherwise accessible records are available that might provide other investigative leads?
4. What are the best sources of other friendly and reliable information?
5. Who are the ultimate targets?
6. Is the case best pursued as a civil or criminal matter?
7. If criminal, what are the expected charges?
8. What are the likely costs in time and resources--is the investigation worthy of the expenditure?
9. What is the best entry point to the investigation?
10. What investigatiave obstacles can be anticipated?
11. What legal obstacles can be anticipated?

Each of these determinations requires input considerations from both investigator and attorney. The worst mistake that can be made by a lawyer is to believe that legal training is the only qualification necessary to make decisions outside his or her specific realm of expertise. In most cases, the assigned experts and investigators, by virtue of professional experience, training, and credentials, have valuable insights

to add to the decision-making process. Depending on the circumstances and the individuals involved, these same persons may have a more accurate perception of how a case will look in court than the prosecuting attorney.

These fundamentals aside, a good working relationship with police personnel is also essential for success. Long hours of surveillance, special care in the obtaining of samples, and other case requirements beyond the call of normal duty make it necessary for the investigator to understand the reasoning behind the required job tasks.

1. Testing the Reliability of the Complainant. The reliability of the original complaint often sets the tone for the entire investigation. If the complainant is reliable per se, another governmental agency for instance, then much may be assumed in terms of the competence of decision making, absence of bias, and verification of documents and observation. Conversely, a private citizen's complaint must be viewed in the critical light of those same factors.

Time may also be of the essence. An expert should be consulted concerning the nature and/or extent of the reported harm. A determination must be made regarding the most expeditious means of corroborating the civilian complaint. If there is no urgency, then the team has the luxury of time. Detailed planning should be employed in the determination of the best means of corroboration. If surveillance, how is it to be accomplished? If by other means, what method and what degree of success and/or problems can be anticipated?

2. Is There an Immediate Danger--and If So . . . ? A contingency plan should be available in those instances where contamination is an imminent danger to life or property. A task force approach is suggested as the best common denominator for division of labor. Although even at this stage of case development, the matter may have both civil and criminal implications, and civil and equitable remedies are likely to be the first consideration. Lawyers should be aware of where the

appropriate papers are to be filed. Analytical or other laboratory facilities should be reserved in case of an emergency. A workable community evacuation plan should be agreed upon. The use of responsible pre-planning as a means of developing community sensitivity to hazardous wastes should not be overlooked.

3. Public Records. There are numerous public records available to the investigator of hazardous waste cases.²⁴ Corporate records should be reviewed for a determination of principals and officers. Frequently, a single business, a waste disposal site for example, may be jointly owned by several corporations. Experienced investigators know, of course, that corporate records are often incomplete or misleading in their identification of principals.

Real estate filings, records, and tax returns should also be retrieved to determine record ownership. The investigator should also review all federal, state, and local licenses and permits issued to the target firm. Discrepancies between filings are often more important than the information on the individual form.

The county or municipal records of fire departments, Boards of Health, Licenses, and Inspections should be culled for information and filings concerning incinerator restrictions and storage limitations.

The growth of environmental protection agencies, especially on the state level, has provided investigators with other sources of information: inspection reports, special waste manifests, industrial waste surveys, and histories of administrative activity involving the target firm.²⁵

Since a major phase of many hazardous waste cases involves the transportation of the material, motor vehicle analysis is also likely to be fruitful. Vehicle ownership may identify co-conspirators revealing unexpected relationships between generator, hauler, and disposal site.

4. Other Sources of Friendly and Reliable Information.

The verification process should be viewed from two additional perspectives: (1) for the need to corroborate the reliability of the original complaint; and (2) as the starting point for the gathering of probable cause sufficient to justify the issuance of a search warrant. In either case, the first point of verification should be made with other law enforcement agencies, and their intelligence banks. Most cases will involve the transportation of the waste, and therefore contact must be made with other jurisdictions, most likely those outside the state. Information received from other law enforcement agencies carries with it prima facie validity. (See Whitely v. Warden, 401 U.S. 560 (1971).)

As noted on other occasions, courts do recognize inherent reliability in certain classes of information.²⁶ If data are relied on in the regular course of business, they are given special status. Citizen informants whose complete identification is made known in the body of a search warrant are also accorded special recognition for honesty.

Community groups, especially those with particular interest in environmental issues are likely to be a source of continuing information. Recent sensitivity to problems of worker safety has aroused union leadership to the dangers of hazardous wastes. Employees, of course, have the advantage of continuous on-site observation. It is well to remember that the illegal dumpers and generators of hazardous waste represent an adverse community interest. It is a responsibility of prosecutors and investigators to exploit that conflict of interest.

5. Who Are the Targets? In any white-collar crime investigation, target selection must be given high priority. Hastily made decisions concerning immunity, culpability, or even anticipated outcomes often leave an indelible mark on an investigation. It is particularly important in hazardous waste cases not to eliminate parties as potential targets too early in an investigation. After there has been a complete

investigation of the hauler, a waste generator's protestation of innocence may ring hollow,

The decision to target either a corporation or individual as a defendant is especially important. Once the government has formally indicated that its focus will be on the corporation, it is usually bound by that decision.

An additional important question concerns the least culpable party who is able to supply the most information. Secretaries responsible for the typing and filing of manifests and other forms often have great potential as witnesses.

6. Is the Case Best Dealt with as a Civil or Criminal Matter? In any heavily regulated area of concern, civil and criminal jurisdictions will often overlap. The decision on civil or criminal pursuit must be weighed carefully. It is likely that such decisions will ultimately characterize the success or failure of an enforcement program. There can be no question of the appropriateness of civil remedy in particular circumstances, and it must be recognized that the state will not be able to prosecute every regulatory offense as a crime.

Criteria for making the distinction between civil and criminal processing are reviewed elsewhere in this manual. It is sufficient at this point to underscore the need for the chief prosecutor to be able to articulate specific reasons for a particular decision. The decision to allow either a corporate or individual defendant to escape criminal liability, by consent decree or other civil remedy, is justly viewed in a harsh and unforgiving light. Prosecutors should not allow themselves to be drawn into false distinctions based on the degree of injury. Damage to the environment should not be unnecessarily distinguished from damage to individuals. Rather, the focus should be on the recklessness of the act, and the degree to which concern for community health and safety has been disregarded.

Guidelines for prosecution should be discussed and then put in written form. Although the ultimate legal decision must

always rest with the prosecutor, input from the investigators may be crucial. They have the best "feel" for what information might be available and just how "sick" the generating plant is.

7. What Are the Expected Criminal Charges? Although the final decision on charges must await the outcome of the investigation, preliminary strategy dictates the construction of an inventory of alternatives to provide for the most efficient use of resources. Is the defendant to be charged with environmental crimes in addition to being accused of matters of data disclosure? Will the proof be essentially the same for both cases? If the suspected crime is a continuing offense--routine dumping of hazardous wastes for example--there must be an evaluation of existing evidence so that a decision can be made regarding how long the practice can or must be allowed to continue.

8. What Are the Costs in Time and Resources? There is no successful hazardous waste prosecution unit in the country that is not limited in its performance by the scarcity of certified analytical resources. There can be no case without the supporting chemical analysis. The federal government has added to the problem by setting rigid standards for labs and testing, as well as monopolizing the use of existing certified labs. Thus, the problem of case selection is significant.

Criteria for case selection are often the same as those that make a particular case criminal, i.e., how severe is the harm, and how reckless was the act. A false data disclosure prosecution might be brought with little or no drain on lab resources. The threat of prosecution or even the knowledge of the investigation may be sufficient to achieve the desired result.

Inextricably linked to the case selection process is the ongoing dialectic between proactive and reactive investigation. Estimations of case impact can never be certain. Is the public better served by a series of small but

successful cases, or by a single suit brought against a large corporation in extensive litigation?

It is suggested that preliminary efforts be directed toward the building of a successful track record, which in itself, becomes an instrument of negotiation. A supreme effort must be made to deal, in writing, with every complaint brought to the attention of the prosecution unit. Other investigative agencies and the public at large deserve to be given a prompt response on referrals. Any referral carries with it the obligation for an explanation of the agency response.

9. What Is the Best Entry Point for Investigation, i.e., Where Do We Start? The specific circumstances attendant to each case dictate the starting point. It is the view of most persons experienced in hazardous waste prosecutions, however, that absent an obvious lead, the point most vulnerable to investigation is the transportation stage. The hauler is relatively easy to identify and follow. Once on the open road, the driver is isolated from co-conspirators and/or employers. Truck driver-employees may have no provable knowledge of the actual nature of the load they are carrying or of the adequacy of the dump site for which it is intended, and are times more likely to become cooperative witnesses.

10. What Investigative Obstacles Can Be Anticipated? Every investigation has its problems. To the extent that these problems are anticipated, they can be overcome. Almost every hazardous waste investigation can expect difficulties in surveillance, and in locating an adequate and accessible lab facility with technicians available. An approach must be formulated for the execution of search warrants and obtaining samples. Theories and methods of dealing with these obstacles will be discussed in the following pages.

11. What Legal Obstacles Can Be Expected? The scientific complexities of hazardous waste cases are the source of many obstacles to conviction. Chains of custody, sampling procedures, and statutes of limitations must also be considered

points of special vulnerability in any hazardous waste prosecution. At the outset of the investigation, overlapping civil and criminal responsibilities must be confronted. Decisions as to use of subpoena power, administrative search warrants, and the like must be arrived at jointly. The corporate structure of most defendants clouds the focus of blame. Jurisdictional problems may arise regarding the shipment of the material. Venue in areas hit hard by chemical pollution has also been challenged by defendants who fear community bias against them. Government attorneys seeking the implementation of severe civil penalties envisioned by RICO and/or quo warranto proceedings can expect a vast array of legal talent arrayed in opposition to the prosecution.

C. Obtaining Evidence

The purpose of the investigation is to obtain both incriminating and exculpatory evidence. Although its ultimate use may be in the courtroom, it is the function of evidence to flesh out a complaint so that a reasoned decision can be made as to its substance, veracity, and in the case of hazardous wastes, its danger. Evidence obtained during the course of the probe of a waste case is likely to be obtained through a combination of five ways: (1) as the result of surveillance; (2) surreptitious monitoring; (3) as items seized pursuant to search and seizure warrants; (4) statements made by targets, co-conspirators, and other witnesses to the crime; and (5) through the use of the grand jury.

Almost every investigation is likely to use each of the listed methods, and in almost every instance, the evidence obtained through one method is likely to be built upon by the use of another. None is mutually exclusive of the other. The grouping mentioned above represents only a logical pattern of development and not a set plan.

An attempt is made in the following pages to analyze and discuss each of the methods in terms of need, effectiveness, problems, and cost.

1. Surveillance. Surveillance usually involves observations of two kinds: (1) visual or electronic observation, and (2) pen registers. Of the two, hazardous waste cases will most frequently employ visual observation. The reasons are obvious; once the existence of illegal activity has been determined, identification of the wrongdoer must still take place.

Few cases can be successful without the demonstration of a pattern of continuous dumping. A single instance of "off loading" is likely to be dismissed as an accident or "mistake," susceptible to civil remedy. Unless the violator has a previous history of similar offenses, or the danger to the environment is extreme and immediate, such cases are likely to be viewed as hardly worth the cost of analysis.

a. Visual observation. Visual observation takes many different forms, but most commonly employs unmarked cars or vans, and the use of high-powered observation equipment for long-distance viewing from secluded locations. The circumstances likely to surround illegal hazardous waste activity make usual observation a task difficult to accomplish.

Targets are usually careful to conceal illegal dumping. "Off loading" of hazardous waste is most likely to occur at night and in remote areas. If an industrial site is used for the activity, very few workers are likely to be present. Those that are present may be hidden behind a high fence, so that personal identification is difficult.

The object of surveillance is to document the illegal activity and its link to the hazardous substance. Pictures must be taken. The use of infrared film to show the presence of certain toxic material is recommended. Proof of fact requires that the government demonstrate that the hazardous waste dumped was, in fact, dumped by the defendant and at the

time recorded in the surveillance. Where the activity occurs on public property, it may be possible to obtain samples immediately after the target has left the crime scene. Unfortunately each dump site presents the investigator with its own set of difficulties. Landfills tend to be open providing no cover. Wooded areas combine problems of observation with remoteness. For all intents, such sites are inaccessible to all but helicopter surveillance, and even there infrared equipment must be used for "spotting" the dump. For investigative purposes, residential areas provide the best opportunity for hidden observation in unmarked vans, or even the house of a friendly and trusted resident.

Federal authorities have projected the use of satellite observation for surveillance. U-2 flights utilizing infrared photography and observation have already been employed. The routine use of such techniques, however, is beyond the scope, experience, and imagination of this author.

The cost of visual observation in person-hours can be substantial. Much depends on the nature of the background information supplied to investigative personnel. If they know when the dumping will take place, time is not wasted in waiting. The need to establish through direct evidence the willful repetition of the criminal act is paramount. Pictures taken of the defendant in the commission of the crime are good examples of such evidence. As noted earlier, however, photos do not, by themselves, tell the entire story. The pictures must be proven to be of a criminal act as opposed to mere dumping. The substance in the photos must be shown, beyond a reasonable doubt, to be hazardous waste.

Undercover agents must have a sure handle on the law and understand what is meant by entrapment. They cannot engage the defendant in the performance of any crime he or she would not otherwise have been pre-disposed to commit.

A further problem presented by the undercover surveillance of hazardous waste cases is that, with few exceptions, the

agent cannot merely "go along for the ride." In such circumstances, he or she may be placed in a position of having to play a substantive part in the planning of criminal activity.

b. Electronic surveillance. Surveillance may also be electronic, and as such usually refers to wiretapping and bugging.²⁸ The courts' recognition of the severity of the intrusion upon individual privacy caused by this form of observation has, however, made it a tool that must be used with great care by investigators. The United States Supreme Court placed electronic surveillance within the protective zone of the Fourth Amendment in Katz v. United States 389 U.S. 347 (1967) and Berger v. New York 388 U.S. 41 (1967). As a result, with the exception of monitoring with the consent of one of the parties to the conversation, electronic surveillance is subject to Fourth Amendment warrant requirements.

The probable cause requirement for electronic surveillance has been thoroughly discussed and analyzed.²⁹ It is sufficient for purposes of this manual to note that in addition to the usual justifications for search and seizure, there must be statements of particularity as to conversations sought, place of conversation, and conversants. The period of time for the interception must be limited. Furthermore, there must be an investigator's affidavit as to the inadequacy of investigative alternatives.

For all of the reasons cited above, the form of electronic surveillance most likely to be used is consensual monitoring. Such monitoring takes place with the infiltration of the criminal enterprise either through the use of a "flipped" co-conspirator or an undercover investigator. The value of electronically recorded evidence is known to every experienced prosecutor. It eliminates credibility as an issue. The state's case need not rest on the plea-tainted testimony of a co-conspirator; nor is it compromised by human limitations of perception and memory.

Investigators and prosecutors must fully understand the duties and limitations attendant to the use of electronic surveillance and undercover operations. There is heavy expense to pay for the constant monitoring of conversations, for not only inculpatory statements but also to guarantee the mandated "minimization" of intrusion. The initial outlay for electronic surveillance equipment is high. Maintenance is also expensive. In addition, such equipment must be used only under the strictest supervision.

Attorneys and investigative personnel must have a sure handle on the law of entrapment. They cannot engage the defendant in any criminal activity he or she would not otherwise have been predisposed to commit. This is especially important in hazardous waste cases where a party might easily claim never to have engaged in illegal dumping prior to the agent's proposal.

The discussion of electronic surveillance would not be complete without some mention of pen registers. A pen register is a device which can be attached to a telephone line to record dialing impulses and thus note the number dialed by an outgoing call. The register does not record whether the call was completed, nor does it record any conversation which may have occurred. The advantage to the use of registers is that their utilization does not require prior judicial authorization because there has been no "interception" of conversation.

Unfortunately because hazardous waste cases take place in the regular and expected course of business relationships, i.e., generator, hauler, and disposal site, telephone contact between the parties cannot be considered particularly incriminatory (the same problem presents itself in the use of telephone call records in the establishment of probable cause).

2. Surreptitious Monitoring of Waste Sites Under Court Order. The New Jersey Toxic Waste and Prosecution Unit has received judicial approval for an innovative form of surveillance particularly well suited for hazardous waste

investigation--the surreptitious monitoring of a site for illegally disposed toxics. The New Jersey response represents a sound means of dealing with the difficult problem of illegal waste disposal occurring on private property. The public concern is compounded where the private property permits access to public sewers or streams.

The New Jersey procedure, as yet untested in the courts, is not without analogous precedent. Courts have ruled that prior authorization for electronic surveillance carries with it permission for surreptitious entry for purposes of installation of recording and transmitting devices. In U.S. v. Agrusa, 541 F.2d 690 (8th Cir. 1976), the court held that entry for this purpose was justified by the exigent circumstances of announced entry. In Application of U.S., 563 F.2d 637 (4th Cir. 1977), the court held that surreptitious entry was the only means by which the government could be expected to proceed. The same reasoning would appear to apply to the investigation of hazardous waste cases where the intrusion is not likely to be a person's private residence as opposed to an industrial site or a warehouse sewer connection.

3. Search and Seizure Warrants. The use of search warrants is basic to hazardous waste investigation. Warrants are used to obtain samplings on private property, as well as books and records. In most cases they provide the element of surprise necessary to counter the covert operation of illegal dumping. Search warrants can be used to obtain individual as well as corporate records. (See Andressen v. U.S., 427 U.S. 463 (1976).)

Warrants provide access to a dump site and to the people who work there. Such presence, if properly taken advantage of, may lead to statements by employees or other "insiders" seeking to disassociate themselves from an illegal enterprise. At the very least, search warrant execution allows the investigator to view the crime scene, and possibly to observe the crime taking place.

For analytical purposes, discussion of search warrants should consider necessary probable cause, and methods and hazards of execution. In addition, environmental crimes give rise to different concerns that must also be weighed.³⁰

a. Probable cause. The law is clear that search warrants "shall not issue except upon a showing of probable cause to a neutral and detached magistrate." The demonstration of probable cause is made difficult in hazardous waste cases by the obstacles involved in "showing that a crime has been committed" and then identifying the wrongdoer. It is one thing for a citizen to complain of foul odor; it is quite another to determine the cause and the criminal violator.

There must be scientifically reliable proof of the existence of a hazardous waste, established either through proper sampling or on the representations of someone a court would have probable cause to believe. A cautionary note is warranted. An affirmative court's finding will be subjected to scientific second guessing by defendant's expert as to whether the court properly issued the warrant. The challenge is not to get the warrant signed, but to have sufficient facts to back it up. The establishment of probable cause in a hazardous waste search warrant requires a detailed description of the hazardous waste itself, and the nature of the danger it presents. Documentation of the source and reliability of information is, of course, required.

(1) Description of the waste and its danger. In many instances, the nature of the waste will be known to investigators. This will be true where the waste is the product of a known industrial process or user. On other occasions, a major effort may be necessary to identify and analyze the chemical cause of pollution. Where the toxic waste is enumerated by statute, it should be designated as such with specific citation in the body of the warrant. In the latter instance, it is crucial that the testing process be set forth

in the warrant, as well as the credentials of the persons performing the test.

Even where the waste is known, there must be knowledgeable citation of the danger presented to the community. A warrant may be bolstered by a limited recitation of community complaints of health problems which are related to the waste. Scientific affidavits may be attached to the warrant.

Under most dumping statutes, it is not necessary to establish the quantity of waste being dumped. Where, however, the hope is to pursue a common law crime such as risking a catastrophe, then at least an estimate of the amount is necessary.

(2) Reliability. The hallmark of a search warrant is the reliability of the information justifying the invasion of another's privacy. As in many other situations requiring the use of a warrant, surveillance is employed routinely.

The problem is that the activity being recorded appears perfectly legal to the casual observer. The loading of containers onto trucks from a shipping platform is legal activity until it has been demonstrated otherwise. How is the issuing authority to know that the particular item being transported or dumped is toxic? Inside information is, of course, helpful; the location of the transaction on an industrial site may be important, and sampling of spillage may offer other possibilities.

The difficulty facing the investigation at this point is that the same elements necessary to prove the crime are required of the warrant. The chain of evidence from the time the waste leaves the point of generation until disposal is important. Where sampling is used to support the affidavit of probable cause, the actual sampling technique must be described. The credentials of the person doing the sampling are important, as are his or her governmental duties and responsibilities, if any.

Dates and time of surveillance must be recorded to demonstrate a pattern of activity. Surveillance or other corroborative information must be constantly updated to avoid contentions of staleness. Where the dumping activity is a required manufacturing function, this is not too difficult. Where the off-loading is sporadic and dispersed in location, then proof is difficult. Surveillance reports should include sensory perceptions as to color, odor, etc.

Special effort should be made to link the state manifest system, where it exists, to the formulation of probable cause. Thus if a truck is making unreported pickups or deliveries at a waste generation site, this should be noted, as should the registration status of the site.

b. Location to be searched. As in the case of all search warrants, the location to be searched must be described with particularity. Consideration must be given in toxic waste cases, however, to the transiency of the crime. If trucks are being used in the illegal transportation, they should also be searched. Residue found in the truck may provide a vital link in the chain of evidence. A search warrant should be used for each type of location--sewer access point, disposal site, tank truck. The probable cause for search of each is distinct though related. It is likely to be of varying strengths. Separate warrants ensure against a single weakness in probable cause invalidating more than a single search.

Toxic waste cases are economic crimes. Books and records are important. Seizure of chemical samples must be supported by search of business offices for documentation.

In many cases, the "search" will involve the taking of samples at a rural property. In these instances, the location to be searched is best described in relation to known roads and highways. It may be necessary, however, to take the additional step of making a traditional description in terms of metes and bounds as recorded in the office of the county clerk.

c. Description of the property to be seized. The items seized in a toxic waste case should be samples of wastes being both stored and transported, as well as samples from adjoining streams or sewer lines. Any required records should be seized--waste manifests and the like, corporate documents relating the movement and storage of waste, bills of lading, shipping documents, etc. Special care should be made to anticipate which specific documents should be on the premises based on what has been previously filed. Failure to find corresponding documentation may prove to be evidence of concealment.

Records of sales commissions should be seized, as well as visitor registers. These documents may reveal patterns of previously unidentified business activity.

d. Execution of the search warrant. As noted elsewhere, the execution of a search warrant often provides the investigator with his best opportunity to penetrate a criminal case.³¹ Witnesses and targets may be confronted, and sometimes interviewed, without their attorney; the crime scene may be observed and photographed without interference or defendant's prior preparation. The execution of a toxic waste search warrant may afford the view of a crime actively in progress.

Execution is complicated in toxic cases by the legal and scientific problems of chain of custody, preservation of evidence, and security of the crime scene. For these reasons, warrant execution cannot be left to chance. Each step must be planned, contingencies anticipated, and work-products provided for. Pre-execution planning should be discussed by all expected participants. There should be a thorough understanding of goals and legal difficulties. Investigators should know who they might expect to see at the execution site and how each of those persons is to be contacted. Expert planning should consider each of the following topics: (1) who should execute; (2) what is to be seized and how, including

considerations of safety and individual expertise; (3) who to talk to and how; (4) expert input; and (5) necessary follow-up and analysis.

(1) Who should execute? As a general rule, search warrant execution is best accomplished without the "help" of lawyers, whose potential legal liability and inexperience with actual crime scene investigation may tend to get in the way. Conversely, the expert who will be expected to testify at trial can be extremely helpful at the scene. The expert knows what is needed, and can supervise sampling and retrieval of chemical evidence. The expert may also suggest questions of potential witnesses.

As in all searches, a chief investigator must bear first responsibility at the execution site; and must have direct and available access to attorneys supervising the investigation.

Execution of the warrant must never be attempted without the presence of someone completely familiar with the facts of the case and existing evidence. This individual should be responsible for seizure of books and records, and should be given access to the target's business office where provided for in the warrant.

(2) What is to be seized and how? The items to be seized range from chemical samples to business records. Thought must be given to how the sampling process will be undertaken. Expert guidance must control the number of samples and from where they must be taken. Both sewer lines and streams running through a property may be tested. Actual sections of pipe may be removed to show the original source of pollution.

Note must be made of each location from which samples are to be taken. Investigators should be warned of the differences in toxic concentration at each site. Medical personnel should be on call and available in case of emergency.

As in most investigations of this type, the sampling process should be photographed, as should any other "exotic"

seizure--the aforementioned section of pipe, for example. Photographs should also be taken of possibly relevant evidence that cannot be seized--drums containing waste, for example. Care should be taken to make certain that identifying markings, if any, or the absence thereof, are included in photos or otherwise recorded. Truck license plate numbers should be obtained.

Consideration must be given to the safety of the investigators, and provision made for rubber gloves or air masks where necessary. Once again, expert advice is necessary. Failure to smell an extremely toxic substance may be symptomatic of a sensory loss and a danger signal.

As noted earlier, the business records seized in a toxic waste investigation are subject to the same rules of handling as in the case of any other business crime.

(3) Who to talk to? The execution of a search warrant affords unparalleled opportunity to confront targets and potential witnesses in a non-custodial setting and before the investigation has "focused" on a particular person. In addition to the usual key individuals, secretaries, and the like, toxic waste cases suggest others as persons to be isolated and talked to at the moment of execution. The foreman at either the dump site or the generation point is usually most familiar with the routine practice. He is, like the secretary, also not likely to be directly profiting from an illegal operation.

The gateman, in a state requiring the use of manifests, will be responsible for signing off on forms, and is often the most logical starting point for investigation. He may be questioned about so-called "lost manifests" which might have recorded toxic wastes leaving a generating plant.

Personal contacts should not be left to chance. When made, they should be handled by one familiar with the investigation. Evidence in hand and theories of investigation should only be revealed when part of a deliberate plan.

Haulers are also good contact points. Haulers may often plead ignorance as to what is actually being transported, placing themselves beyond the realm of successful prosecution but within the range of anticipated investigation and willingness to cooperate. Conversely, a trucker stopped with waste in his tanks may see cooperation as in his best interests. The general rule prevails--no one wants to go down alone.

(4) Expert input. There is nothing in the background or training of the average investigator or prosecutor that prepares them for the demands of toxic waste investigation. While there is no stage of investigation where expert advice is not needed, it is essential for search warrant planning and execution.

The expert must provide input regarding a number of issues: what is to be taken and how; storage of samples for testing; post-execution analysis; storage of samples for trial; and obtaining additional expert opinion.

Following warrant execution, the investigative team also faces immediate problems. Failure to anticipate and provide for those difficulties can destroy an investigation, as well as prolong community exposure to improperly handled toxics. There are at least three post-execution responsibilities to be needed: (1) analysis of samples; (2) public announcement, if any; and (3) the investigation/prosecution's next moves.

(5) Follow-up and analysis. The most difficult problem currently facing hazardous waste investigation is the shortage of certified laboratory facilities. Particularly stringent federal standards for certification have proven difficult, if not impossible, for state and local governments to meet. Certified labs have, in the meantime, been reserved for federal enforcement programs.

Lab time and facilities must be available for analysis of samples immediately after a warrant's execution. As in any

investigation, execution of the warrant makes the probe a matter of public knowledge; quick follow-through is essential.

The public health problems posed by hazardous wastes require that government respond immediately to any confirmed danger. Public warnings may be necessary. Thought must be given to a form of warning consistent with a potential defendant's protection from pre-trial publicity and maintenance of the public health.

It may be necessary to alert city or county health agencies as a warrant is being executed. Water treatment facilities may need "gear-up" time before they can assume additional burdens.

Finally, careful consideration must be given to the effect that knowledge of the search warrant's execution will have on targets, potential witnesses, possible co-conspirators, and even lethargic public agencies. It may be necessary to have a second team of investigators poised to serve a second set of warrants or contact potential witnesses. Co-conspirators have usually been identified prior to service of the warrant. A piece of information in a seized business record may provide probable cause to search the plant office of the waste generator. As noted previously, hazardous waste crimes are likely to involve a constellation of participants--generator, shipper, dumpster, and possibly a government agent. No investigative step should be taken without regard to its effect upon the configurations of the "stars" and how the constellation will be effected.

4. Using the Grand Jury. The investigative grand jury and its handmaidens, the contempt power and use immunity, are the standard tools of criminal investigation. There is little that this manual can add to the volumes written on the subject. For purposes of grand jury work, a toxic waste inquiry is to be viewed in much the same light as any other economic crime investigation.

The prosecutor of these cases must never forget, however, the context in which most of his cases will arise--the routine

performance of a business activity, overseen and supervised by persons likely to consider themselves pillars of their community. In most cases, the offenders will have regarded hazardous waste statutes and regulations as inapplicable to their firm. These targets consider neither themselves nor their activity as criminal. Under these circumstances, more so than in other types of white-collar crime such as embezzlements, bribery, etc., it is unreasonable to expect either the lawyer or the defendant to play by the normal "rules of the game." Righteous indignation and the desire for vindication are more likely attitudes.

The result is a heavier initial challenge for the prosecutor. Until the target is convinced of his or her criminal jeopardy, the opportunity to obtain cooperation, short of civil settlement, is unlikely.

Yet, the hostile posture of the target may be turned to an advantage. The defendant should be invited to tell his side of the story to the grand jury. It is noteworthy that although there is no right to such an appearance, the prosecutor's failure to make such an offer may become the subject of pre-trial litigation.

Pre-trial discovery of the defendant's case is always to the advantage of the prosecutor. The target should be encouraged to talk as much as possible. If a legitimate defense is offered and verified, the investigation may be closed. At the very least, the target's appearance before the grand jury equips the prosecutor with a statement under oath, explaining the offense, and exposing the theory of the defense.

The corporate setting for toxic waste offenses is likely to give rise to another set of legal difficulties ranging from a coordinated approach to defense to outright witness-attorney conflicts of interest. Witnesses are likely to be employees of the principal target--individual or corporate defendant. Counsel fees are likely to be paid for the witness. Instructions may be given prior to appearance, and followed by

debriefing sessions. An obstructive strategy may be developed by the defense team. A single attorney or group of lawyers may act as a clearinghouse for information. Tactics regarding pre-trial discovery, and motions to quash may be coordinated. It is still unclear as to how far the courts will go to deal with such challenges. Each case will be looked at on its own merits. Indices of witness control will be examined by the court: (1) who is paying for counsel? (2) existence of separate classes of witnesses with distinct degrees of criminal jeopardy; (3) preferred evidence before the jury, e.g., are witnesses making unnecessary use of their fifth amendment? (4) are there indications of a strategy to subvert the efforts of the jury? It may be necessary to have a separate hearing for the determination of these issues.

The prosecutor's ability to deal with such coordinated efforts is limited. The general rule is that an attorney for multiple witnesses can be disqualified only when there is demonstrated that an actual, rather than supposed or hypothetical, conflict of interest exists.³² A fine line and a mountain of proof separates a person guilty of obstruction for having advised another to assert his or her Fifth Amendment privilege with "corrupt motives,"³³ from one who cautions a friend that it is not perfectly clear that his answer to a grand jury's question might not provide a link in the chain of evidence needed to convict him of a crime.³⁴

The confidentiality of an attorney's work-product also raises significant questions. It appears that the privilege applies to communication to the top management.³⁵ The privilege may be overcome, however, under certain circumstances, given a substantial demonstration of necessity by the government.³⁶

5. Organized Crime and Toxic Waste Investigation.

Recently much has been made of the strong tie-in between toxic waste offenders and organized crime. Exponents of the interrelationship compare the similar circumstances attendant

to garbage and trash collection. Although the evidence of the interrelationship clearly exists, its relevance to the investigation and prosecution of hazardous waste cases is yet to be demonstrated. It is sufficient to note that hazardous waste removal is another "legitimate" business where the opportunity created by loose and contradictory government enforcement, together with great profit potential, has not been overlooked by organized crime. Intelligence efforts should be made by those responsible for toxic waste investigation, therefore, to pursue evidence of possible organized crime infiltration where there are indications of such activity.

6. Using Informants in Hazardous Waste Investigations.

Generally the same rules of investigation concerning the use of informants apply to toxic waste cases. The greater likelihood of using employee or other "inside information" in such investigations, however, merits some comment.

Haulers or other employees who suddenly discover (or who are told) that they have been unknowingly handling life-threatening substances may easily be persuaded to forget previous loyalties to the boss. These same employees usually have access to information necessary to establish probable cause for a search warrant or a grand jury subpoena. Knowledge of pickups, quantities of substance, and other facts will likely be within such an employee's reach.

Of course, it must be noted that once an informant has come forward and shown a willingness to cooperate, whether on the government payroll or not, he is an agent of the state. His activity is limited. If a target employer has a reasonable expectation of privacy from government observation, that protection extends to informants working for the government. Any information gathered by the informant in his private capacity, prior to making contact with the state, is not subject to similar restrictions.

V. THE PROSECUTION OF HAZARDOUS WASTE CASES

The prosecution of hazardous waste cases presents many of the same problems as other white-collar crimes. The cases are complicated, however, by the scientific/industrial environment in which they originate. Problems in scientific understanding are created for investigators, attorneys, and fact finders--whether judge or jury.

Philosophical issues are raised as to what is acceptable or reasonable risk. The industrialist argues, quite appropriately in some cases, that certain risks must be expected, certain costs of production cannot be assumed, and yes, certain records may in fact, be haphazardly filed.

As noted elsewhere, the criminal prosecution of otherwise legitimate businesspersons for crimes arising from their daily business operation is a relatively recent phenomenon. Each case spawns new legal issues--corporate versus individual liability, problems of circumstantial evidence, corpus delicti, statutes of limitation, and case presentation are complicated by the scientific background of the case and fact finder discomfort with the issues presented. Expert qualification and direct examination are likely to be first-time experiences for most prosecutors.

A. Toxic Waste Prosecution--The Legal Issues

1. The Corporation as a Defendant. It is noteworthy that at common law, and under early American law, corporations were considered incapable of committing crimes. This, of course, is no longer the case. The leading case establishing modern theories of corporate criminal responsibility is New York Central and Hudson River Railroad v. U.S., 212 U.S. 481 (1909). In its decision, the Supreme Court specifically upheld a statute prohibiting rebates, and made the corporation responsible for the acts of its agents. The decision to charge a corporation is most appropriate where the statute in question

requires no showing of criminal intent, and the law specifies strict liability, "public welfare," offenses requiring no proof of motive, intent, or knowledge. It is noteworthy that where the acts of high-managerial officials tie the corporation to a criminal violation, the acts and intent of lower-level employees are only generally imputable to the corporation.

The Model Penal Code imposes criminal liability on corporations. It specifically notes the responsibility of those entities for omissions to discharge a specific duty or statutory function.³⁷ The corporation is held liable criminally for the conduct of an agent acting on its behalf and within the scope of his employment.³⁸

Unincorporated associations are likewise covered by the Code, reflecting the current trend in regulatory legislation whereby the definition of "person" is used to include individuals, partnerships, corporations, and associations. There are, in fact, some who argue that the concept of corporate criminal liability has been over-emphasized to the point of unfairly punishing managers and directors who have exercised due diligence.³⁹

Generally corporate crime is imputed in one of two ways. A corporation will certainly be held criminally liable for the illegal acts of its president or other officers.⁴⁰ Second, the acts and intent of lower-level employees are also generally imputable to the corporation⁴¹ without regard to that employee's position in the corporate hierarchy.

Limitations of liability have, at times, been imposed on the acts of lower-level employees where conspiracy has been charged. The crime required a specific showing of intent. This reflects the approach of the Model Penal Code which requires that there be a showing that the act was authorized or requested by a corporate officer. It is noteworthy, however, that the Model Penal Code view is not prevailing, the majority of federal cases hold corporations liable for specific intent crimes committed by subordinate employees.⁴² This is, in

fact, the most prevalent form of corporate crime. The most common instance in hazardous waste prosecutions is where company officials make a decision that corporate interests will best be served by false reporting.

In addition to the prosecution showing that the corporate agent was acting within the scope of his authority, there must also be a showing that the criminal act was intended to benefit the corporation. Thus if the employee and a third person reap the benefits of a crime, the corporation may escape liability. An example may be where a waste generator pays the going rate for toxic disposal and, unknown to him, his employees reap the gain from cheaper, illegal dumping.⁴³

It should also be noted that an employee's illegal acts done in violation of company policy do not necessarily provide a defense. A line of federal cases has rejected the due diligence defense and imposed criminal jeopardy. This is especially important with regard to criminal prosecution of data disclosure crimes.⁴⁴ The courts have rightly refused to allow large corporations to evade responsibility by delegating reporting responsibility to far-flung and low-level employees, over whom they have little direct control.⁴⁵ In this context, even good faith efforts have been held not to be a sufficient defense to corporate liability.⁴⁶

It should be noted, however, that Section 2.07 (5) of the Model Penal Code does provide a defense "if the defendant [corporation] proves by a preponderance of evidence (emphasis added) that the high managerial agent having supervisory responsibility over the subject matter of the offense employed due diligence to prevent its commission." There is even some case law to indicate that a corporation's liability for criminal acts may survive a merger or other change of identity.⁴⁷

Although it is of prime importance that the individuals responsible for corporate criminal behavior do not escape the net, the public benefits to be derived from criminal

prosecution of a corporation tend to be unduly minimized. Punishing the corporation creates adverse publicity, retrieves illegally obtained profits, and alerts shareholders to the acts of their corporate officers. Successful prosecution may result in the suspension of licenses and permits. Under the doctrine of res judicata the corporate criminal is unable to relitigate its liability in the defense of civil suits.⁴⁸

2. Prosecuting the Corporate Agent as an Individual.

Effective law enforcement requires the prosecution of individuals who have it within their authority to bring a corporation into regulatory compliance and have either permitted or specifically authorized criminal evasion. The concept of the responsible corporate officer has been developed primarily under the food and drug laws.⁴⁹ In U.S. v. Park, 421 U.S. 658 (1975), the Supreme Court held that the President of Acme Markets was criminally liable and ultimately responsible for violations of the Food and Drug Act essentially because it was his duty to prevent their occurrence.

The court's language in that case is particularly instructive. The Food and Drug Act was construed by the court as imposing:

. . . not only a positive duty to seek out and remedy violations when they occur but also, and primarily, a duty to implement measures that will insure that violations will not occur. The requirements of foresight and vigilance imposed on responsible corporate agents are beyond question demanding, and perhaps onerous, but they are no more stringent than the public has a right to expect of those who voluntarily assume positions of authority in business enterprises whose services and products affect the health and well-being of the public that supports them. (United States v. Park, 421 U.S. at 672.)

In defining who has authority to prevent or promptly correct, the Court said:

. . . the Government establishes a prima facie case when it introduces evidence sufficient to warrant a finding by the trier of the facts that the defendant had, by reason of his position in the corporation, responsibility and authority either to prevent in the first instance, or promptly to correct, the violation

complained of, and that he failed to do so. The failure thus to fulfill the duty imposed by the interaction of the corporate agent's authority and the statute furnishes a sufficient causal link. (Id. at 679.)

Thus it is clear that individuals are responsible and accountable for any act done in the name of the corporation as well as the performance of any corporate duty imposed by law. As in the Park case, it is not necessary for the individual charged to have participated in the crime, or even to have consciously done wrong. There is no distinction made in the sentencing structure for crimes committed by corporate personnel as opposed to individuals acting on their own behalf.⁵⁰ There is no person familiar with the criminal process who is unaware of the horror with which the white-collar criminal views criminal indictment. It is a rare occasion where the "good name" of the corporation will not be sacrificed in the protection of the board of directors.

Although as noted earlier, where there is good reason to charge the corporate defendant as recipient of profit and benefits generated by the acts of its agents, the dictates of effective law enforcement require prosecution of the individual. Decisions made around the corporate table are done with due deliberation. The risks and rewards are measured, and the odds are calculated. It is only in the rarest of cases when corporate benefits do not also result in material advancement for the agent. This is not to say that there are no cases where the imposition of individual liability would be unfair, rather it is to note that to the extent the individual is forsaken in pursuit of the corporation, the effectiveness of the enforcement effort has been compromised. It should be recognized as such.

Punishment visited upon the corporation falls on the shareholders. In a publicly held firm their relation to the defendant corporation is invisible. Where a fine is imposed

the shareholder's loss is limited by the amount of his or her equity.

3. Culpability--Omissions and Recklessness. Closely related to the legal issues relating to corporate and individual criminal liability is the concept of culpability. The Model Penal Code imposes criminal sanctions on omissions to act where the duty to perform the omitted act is imposed by law. It is noteworthy that the described duty may arise under a branch of the civil law.⁵¹ Thus in the case of toxic waste prosecutions one may be held in criminal jeopardy for a breach of duty arising under the civil law.⁵²

Recognition of omission is closely related to the concept of criminal recklessness which is defined under the Model Penal Code in this way:

A person acts recklessly with respect to a material element of an offense when he consciously disregards a substantial and unjustifiable risk that the material element exists or will result from his conduct. . . . The risk must be of such a nature that its disregard involves a gross deviation from the standard of conduct that a reasonable person would observe in the actor's situation.

It can be seen that in its definition of criminal recklessness, the Code points to both the surrounding circumstances or environment, and the actor's behavior. There is an element of conscious risk creation. On first glance, it would appear that these sections of the Code were written specifically for purposes of toxic waste prosecution; close examination, however, shows this not to be the case.

Standards of unreasonableness and justifiability may create difficult problems of cost-benefit analysis and customary business practice. With regard to criminal prosecutions, it can be assumed that where the defendant is able to retreat to the high ground of industry custom and usage, or even to the consumer-borne cost of production, the odds against conviction have been lengthened. Defense counsel's refrain sounds a familiar ring, "A condition can always be made safer; the

question, ladies and gentleman of the jury, is at what cost to all of us?"

The standard for criminal negligence, as opposed to reckless and wanton behavior, is even more stringent. The state must demonstrate that the defendant should have been aware that a substantial and unjustifiable risk would result from his conduct. The risk must be of such a degree that the actor's failure to perceive it involves a gross deviation from the standard of care a reasonable person would observe in the actor's situation.⁵³

The foregoing notwithstanding, recent cases have revealed a gradual evolving federal standard for proof of criminal intent in economic crimes cases.⁵⁴ Juries are now being instructed that they may find criminal intent or willful conduct "if they find that a defendant had deliberately closed his eyes to the obvious, or recklessly stated as facts matters of which he was ignorant."⁵⁵

In the case of Spurr v. U.S., 174 U.S. 728 (1899), the Supreme Court affirmed the conviction of a bank officer who had falsely certified checks. Language in that case has special relevance to the enforcement of a state manifest system and the generator of waste who doesn't care what happens to his paperwork.

Criminal design may be presumed if the officer purposely keeps himself in ignorance of whether the drawer has money in the bank or not, or is grossly indifferent to his duty in respect of the ascertainment of that fact.

In reviewing economic crime cases one author has noted five areas where the Federal courts have found requisite criminal intent.⁵⁶ Any one of these theories, if proven, will result in conviction:

1. Made statements with reckless indifference or disregard⁵⁷ as to whether they are true or false.⁵⁸
2. Closed his eyes to what was plainly to be seen.⁵⁹

3. Acted with a conscious purpose to avoid learning the truth.⁶⁰
4. Failed to exercise due diligence to ascertain the truth.⁶¹
5. Acted with such gross carelessness and indifference to the truth of the representations contained in the statement as to warrant the conclusion that he acted fraudulently.⁶²

In sum, the prosecutor of economic crimes, especially hazardous waste cases, must understand his or her position on the cutting edge of the law. The courts have recognized the difficulties in demonstrating criminal intent and have shown a willingness to meet the problem head on. It is the job of the state's attorney to put the evidence in perspective. The judge and the jury must be shown just why the incriminating facts had to be known, or were deliberately ignored by the defendants.

Criminal intent, of course, may always be inferred from surrounding circumstances. Yet, the determination of whether particular exhibits offered to corroborate theories of defendant's intent will be admitted into evidence is a matter of discretion with the trial court. The responsibility of proof lies with the prosecutor. The outcome of the case will lie in his or her ability to demonstrate the criminal intent of the actors.

4. Corpus Delecti. A footnote to the legal doctrine of corpus delecti is the logical conclusion to a discussion of culpability and criminal intent. Generally, the phrase is defined as the occurrence of an injury or loss consistent with criminal behavior. The complexity of hazardous waste cases, combined with the ever present possibility of actual accident, make questions concerning the "corpus" of the crime a real issue.

For purposes of this manual, it is sufficient to note that the prosecutor has no duty to affirmatively exclude the possibility of either accident or non-deliberate omission to establish the corpus of the crime. There is no need to exclude

every possible non-criminal cause. The proof put forward may be circumstantial and need only demonstrate the possibility of criminal causality. The burden on the state is limited to a demonstration that the loss or injury is consistent with the commission of a crime. As an example, Wigmore, Section 1532, notes:

. . . that the absence of a written entry where one would naturally have been made if a transaction had occurred, should ordinarily be equivalent to an assertion that no such transaction occurred.

The major pitfall to be avoided, of course, is the confusion of establishment of the corpus, with proof beyond a reasonable doubt. The Wigmore citation notwithstanding, business records are rarely decisive evidence in themselves. They are to be considered along with other evidence to be presented to the jury.

5. Circumstantial Evidence. The prosecution of hazardous waste cases must rely, in significant measure, on the presence of circumstantial evidence. Cases may be brought even in the absence of a witness testifying from direct knowledge of the facts to be proven, i.e., on the basis of circumstantial evidence.

Circumstantial evidence is usually defined in terms which tend to prove a disputed fact by proof of other acts which have a legitimate tendency to lead the mind to a conclusion that the fact exists which is sought to be established.⁶³

In hazardous waste cases, circumstantial evidence is likely to be: (1) incorrect or omitted information on a manifest, (2) the presence of a toxic effluent in a stream close to a possible generator, and/or (3) seepage near a dump site.

The admission of circumstantial evidence is discretionary with the trial judge. The prosecutor must be prepared to meet defense challenges to the evidence on grounds of: (1) remoteness, (2) conjectural relationship to the crime, and (3) undue prejudice. It is too late to formulate one's theory of admission when the objection is made at trial.

Problems may be foreseen with the introduction of evidence concerning a collateral issue which may be extremely relevant in establishing motive. The poor financial condition of a company is one example; the cost of proper disposal of the relevant toxic waste is another.

Cues to the introduction of other circumstantial evidence may be found in the prosecution of other types of crime. A change in the financial condition of the principals may be relevant circumstantial evidence. Evidence of a driver who rides to his dump truck in a Rolls Royce might be considered interesting by a jury bored with expert testimony.

It must also be noted that, although conviction can rest solely on circumstantial evidence, inference cannot be based on inference.⁶⁴ This argument is most easily dealt with by a demonstration that what the prosecution is attempting to show by its evidence of cost and financial condition are parallel inferences based on the same facts.⁶⁵

Concealment is perhaps the most effective circumstantial evidence. Testimony regarding the clandestine transfer of unrecorded waste is likely to be the "clue" the fact finder is looking for in final determination of criminal intent.⁶⁶ At the same time, mere presence at the scene of a crime is not conclusive. The night watchman, or even persons known to be co-conspirators, must be shown to know that the waste being transferred is toxic, or that necessary forms have not been completed.

As in all considerations of criminal evidence, each piece to the puzzle is only a fragment of the picture, the reliance on any single piece is likely to be regarded as misrepresenting the scene.

6. Statute of Limitations. The purpose of a statute of limitation is to act as a bar to lawsuits or criminal indictment which, due to the passage of time, would be difficult to defend.⁶⁶

The general rule of criminal law is that the statute begins to run at the time of the commission of the offense. A significant problem may arise, however, where a lengthy period of time elapses between the illegal disposal of a toxic waste and its discovery. It is with good reason that toxic waste disposal is often called a chemical time-bomb. A failure to report required information may not be discovered until a related incident occurs. It may be years before rainfall causes a dump site to leach; that is, the contaminants seep out of the original site and pollute the ground water. The Model Penal Code does make some provision for these types of problems.⁶⁷

In most jurisdictions, prosecutions must be commenced within two years of the commission of the crime. In cases where a material element of the offense is fraud, however, the time limits of the statutory bar have been made more flexible to permit prosecution within one year after discovery of the offense. Under most statutes, the Model Penal Code included, however, no case can be brought more than five years after the criminal act. The same time limitations apply in the cases where public officers or employees are charged with crimes arising out of their public function.⁶⁸

It should be noted that most authorities agree that a crime is not committed until every element has been completed, or in the case of continuing offenses, when a course of conduct ends. This presents an especially important consideration in toxic waste prosecutions, where the focus is likely to be on an illegal business practice that has continued for some period of time--illegal disposal of waste, for example. In such instances the parameters of the crime may be marked by the period of business relations, i.e., conspiracy between the parties.

It should be noted that some statutes define and prescribe a continuing course of conduct.⁶⁹ Since the violative conduct occurs within the period of limitation, it is subject

to prosecution. An example would be a disclosure law requiring periodic reports.⁷⁰ Even in situations where a court is unwilling to hear evidence of events long past as proof of an offense alleged to have occurred during the proscribed period of limitation, these statutes are revived by the last overt act in the conspiracy, often merely a subsequent filing routinely handled in the course of business.⁷¹ In People v. Bellamy, 94 Misc. 2d, 1028, 406 NYS. 2d 250, the defendant who filed semi-annual forms concealing a pending personal injury claim committed a continuing crime for statute of limitation purposes.

Perhaps the most commonly litigated question in this area has to do with the maintenance of a public nuisance. Distinctions are usually drawn between nuisances which are of a permanent nature and those whose harm is of short or at least ambiguous duration. In either case, the best rule for purposes of criminal prosecution appears to be commencing the period of limitations from the time of the last overt act by the defendant.⁷² A cautionary word is necessary. The state's theory of an extended statute of limitation is an element of the criminal offense. It must be proved as such. It must, for example, be pleaded separately in a criminal indictment or information.⁷³

A separate but related area of prosecution ought to be considered at this point. Many statutes require that records be kept for an extended period. This obligation is distinct and may be prosecuted as such.⁷⁴

An interesting issue is raised with regard to the effect of statutory provisions which provide exceptions to periods of limitation in cases where the defendant has no ascertainable ties to the state.⁷⁵ The period of limitation does not run during any time when the accused is continuously absent from the state and has no reasonably ascertainable place of abode or work within the state.) The importance of these provisions is likely to grow with the evasion of the manifest systems act through the interstate shipment of waste. Under such

circumstances, a court may find a compelling state interest justifying the treatment of out-of-state persons differently.

Prosecutors should also be aware of the clear line of case law which suggests that due process claims involving pre-arrest delay are to be tested by balancing the reasonableness of the state's delay against the harm suffered by the defendant.⁷⁶ The state's case is, of course, strongest where it can be shown that the defendant's non-residing was a significant factor in the late discovery of the crime. Finally, the defendant must show actual prejudice, and not just the possibility of harm in attacking pre-arrest delay.⁷⁷ In Marion, the court noted that the defendant had failed to prove that the government intentionally delayed (arrest) to gain some noticeable advantage over appellees or to harrass them.

In conclusion, statutes of limitations are likely to pose significant obstacles to the prosecution of hazardous waste cases. At the same time, the courts have shown a willingness to apply more tolerant and liberal standards when good justification is shown.

B. Toxic Waste Prosecution--The Trial

The task of presenting a hazardous waste case to a jury is not an easy one. Aside from the complexity of the subject matter, the jury is likely to be uncomfortable with the issues it is asked to decide.⁷⁸ Unlike violent street crime, there are no questions of identification or consent. The intent of the accused to file a false statement and the actual knowledge of the accused at the time of a required filing are issues likely to be in dispute. The jury must be put at ease in its deliberation of these questions. It must be reassured that the evidence necessary to convict will be presented in a way which will facilitate their understanding of the issues.

Where the defendant is a corporation, the prosecutor must guard against the jury's sense of the case's diminished importance because there is no human being standing in the box

as the accused. To the extent possible, both the corporate defendant and the executive who claims to know nothing must be revealed as criminals more concerned with bottom-line profits than the health and safety of the community.

As stated previously, the guidelines for toxic waste prosecution do not vary significantly from those of other white-collar cases. The prosecutor must "comfort" the jury with a mode of case presentation that assures them of the ability to demonstrate the elements of the crime and meet head-on any issues raised by the defense. Any hint of confusion in the state's case is likely to be exploited as reasonable doubt.

Areas likely to provide some difficulty in the presentation of hazardous waste cases are the use of experts and opinion evidence, as well as the introduction of documents. Finally, the investigator and the prosecutor must anticipate defense strategies and plan for appropriate responses.

1. Opinion Evidence. As a general rule, courts cannot accept a witness's opinions, conclusions, or inferences as facts. There are, however, two recognized exceptions, which have relevance to toxic waste prosecutions. First, a qualified expert may testify to an opinion or conclusion where the members of the jury would be incapable of drawing an inference or conclusion because they lack the requisite specialized knowledge. Second, a lay witness may also testify as to his or her opinions under certain circumstances. For example, a lay witness may render an opinion which is common knowledge and which is incapable of other or more specific description.

Although the rules are easy to state, their application often proves difficult. What is fact, opinion, or even conclusion is often difficult to determine. As a practical matter, lay opinion evidence will be limited in most cases to sensory descriptions. Some examples of such questions are listed below.

1. What did the vacant lot smell like?
2. What was the color of the substance you saw loaded on to the trucks?
3. Describe any physical symptoms you may have experienced--running nose or eyes, faintness, etc.
 - a. How far were you from the substance when you experienced these sensations?
4. Describe the dump site--vegetation, seepage, etc.

Evidence of this type is extremely important. It provides a means for the prosecutor "to bring his case home." The jury is able to weigh the testimony of a neighbor; someone who speaks in their language. His or her doubts and fears are likely to be those of the community. Moreover, since the lay witness's testimony is description, defense cross-examination is limited in its effectiveness. One cautionary footnote--the lay witness's testimony should be in his own words--it "smelled like rotten eggs," is much better than "noxious fumes"; "I felt sick and vomited" is clearer than more technical or euphemistic language.

2. Expert Testimony. The presentation of expert testimony is, of course, at the heart of a hazardous waste prosecution. As noted previously, the best practice is to involve the courtroom expert in the development of the case in its investigatory stages so that he or she can help to anticipate and deal with future problems concerning presentation of evidence. Early involvement by the expert may also allow him or her to be presented as a fact witness.

One should remember the rule that facts based on credible testimony have much greater weight than the opinions of credible experts. Prosecutors familiar with homicide cases should draw on their experiences. Medical examiners are often given wide latitude in their testimony because their presentations are based on personal observation. Unlike the medical examiner who is usually regarded as a familiar

courthouse fixture, the toxic waste expert must be qualified as to a specific area of expertise. A knowledgeable expert offers no guarantees as a clear and credible witness. He must be scripted and prepared in the same way that any other witness is made ready for trial.

An expert's opinion cannot be used to establish the ultimate facts in controversy. He or she can testify as to the results of dumping, and precautions that might have been taken. He or she can estimate, where properly qualified, as to the cost of those precautions, but cannot tell the jury that the failure to employ those safeguards is reckless behavior. Similarly, an expert can testify as to facts but not as to what the facts mean. A judge should exclude any testimony where the jury is competent to make its own determination.

Experts can be called upon to answer hypothetical questions concerning the case at bar. In the formulation of "hypos" one must remember:

1. All facts which the evidence proves or tends to prove--the omission of material facts from the hypothetical makes the question objectionable.
2. The question cannot be so long or technical that it is incapable of being understood by the jury.
3. Although a scientific text or journal may be used in the framing of questions, they are inadmissible, in and of themselves, as hearsay.

In preparing your expert for trial, the general areas of cross-examination may be anticipated, and therefore can be built into direct testimony: (1) background and training in the specific area in issue; (2) present knowledge of the area and experience in testing, etc.; (3) animus or bias; (4) authoritative books and journals on the subject may form the backdrop for questioning; and (5) credibility is always at issue.

As a hazardous waste prosecution begins to take aim at the higher rungs on the executive ladder, one must expect a battle of experts. To the extent that a prosecutor rests a case

wholly on expert opinion, he or she risks almost certain acquittal. Defense counsel will argue that if two experts as knowledgeable as Dr. X and Dr. Y cannot agree, the jury must have a reasonable doubt as to the criminal intent of Z.

Set forth below are standard questions which may be used as a starting point for the qualification and direct examination of experts in hazardous waste prosecutions. They should be considered in selecting and preparing one's experts, and they also are a partial checklist of necessary investigative activity in the hazardous waste field.

1. Dr. X, by whom are you employed? (Ph.D.'s are usually the best witnesses only because the jury expects an expert to be called doctor. It avoids the defense line of cross-examination based on, "Sir, when will you have completed your training?")
2. What is your undergraduate background?
3. Post-bachelor's degree education?
4. Any published papers or articles in the field? If relevant, what were their topics? How long were they in preparation? Explain exactly what the paper or article was about.
5. Do you belong to any professional societies? Which ones? (Explain relevance of the professional society and its focus.)
6. Do you subscribe to any professional journals? Do you read these on a regular basis?
7. By whom are you presently employed? In what capacity? What are your duties and responsibilities? (Explain in detail.) How long have you been employed?
8. What is your prior occupational experience in the field? How long a time did you spend at each of your prior positions? (Laymen have jobs, experts have positions.)
9. Concerning your work experience, have there been any projects or cases which are particularly relevant to the case at bar?

10. Your Honor, subject to cross-examination, I propose to offer Dr. X as an expert in the field of _____.
(Toxic waste cases may involve geologists, engineers, chemists.)
11. Sir, you are familiar with (site the crime scene)?
- What is the basis of your familiarity? How many times did you visit? For what reason? Accompanied by whom? (Note: In order for this testimony to be admissible, there must be a showing of relevance in time, and scientific relevance to the crime under investigation.)
12. What did you see at the site?
- How was it examined?
 - Describe what you saw, smelled, felt, did anything unusual happen during the course of your observation?
 - Describe in terms of precise location. (If possible with relation to a map or sketch.)
13. What is the effect of what you saw? Of what relevance is it to the crime under investigation?
14. Were samples taken? Explain the sampling procedure. Explain the purpose for the sampling procedure. On how many occasions have you performed similar samplings and analyses? (Same type of question should be asked for any scientific testing procedure.)
15. Was there subsequent analysis? If so, explain.
16. Based on your experience, what opinions have you drawn concerning your samplings⁷⁹ as to:
- Toxicity.
 - Origin.
 - Effect.
 - Extent of damage.
 - Possibility of repair.
 - Cost of repair.

- Danger, if any to the community--extent and degree.
- Could the danger or damage have been prevented? If so, how?
- Did you make any formal recommendations concerning the site? If so, what were they?
- Cost of proper waste disposal.

Although it is impossible to guess the purpose and type of expert testimony that will be required in every case, some suggestions may be made.

- Geologist - to testify concerning water drainage and seepage, source of contamination, areal extent of contamination (movement of contaminated water over time)--this may be influenced by the degree of concentration.
- Sanitary Engineer - (also known as an environmental engineer) public health engineering, water supply, waste treatment, sewer lines, transportation of waste, drainage, cost of treatment.
- Chemist - analysis of compounds, waste treatment, cost of waste treatment by chemical; what, if any, substances can be reclaimed.
- Forensic Pathologist - medical effects of exposure to the hazardous waste.

A final note should be made concerning memoranda submitted by forensic experts. There should not be a word in those reports that has not been assimilated by the prosecution. The expert should be reminded while preparing the report that criminal discovery rules require that it be submitted to defense counsel and their experts prior to trial. Loose language or unsubstantiated concessions must be avoided.

3. Documentary Evidence. As has been noted throughout this manual, great attention must be given to "comforting" the fact finder with the state's presentation of its case. Documents should be mounted, precopied (where the use of copies has been stipulated), and pre-marked. (You should explain your system to counsel, the judge, and court clerk.) It is a good

rule to get documents into evidence as quickly as possible. At the same time, some exhibits whose admission has been stipulated or are certified documents should be held in reserve as a stall tactic when necessary.

Toxic waste prosecutors should consider the use of a chronological chart. Relative times may be important to demonstrating discovery of the hazard, time of generation, etc. An attempt should always be made to obtain defense counsel's stipulation to the authentication of documents as a means of expediting the trial--even though the defendant's right to challenge relevancy is unlikely to be relinquished. It should be noted that any stipulation that is particularly damaging to the defendant must be accepted by the court with safeguards similar to those surrounding a guilty plea.

This manual has noted elsewhere the problems in showing the willful neglect or recklessness which is an element of some hazardous waste offenses. Creative use of experts can help clarify these theories. For example, an economist might be used to compare the defendant's cost of illegal dumping to that of legal and safe disposal.

C. The Defense of Toxic Waste Cases

Real consideration should be given to the likely defense strategy at all stages of a hazardous waste case. It is a means of keeping personnel sharp, provides outlines for the preparation of witnesses, and may give additional direction to the thrust of the prosecution's case.

The most successful criminal defense strategy is not unlike that used on the battlefield. Survey the enemy's position for its most vulnerable point, and then strike there with as much force as possible. Thus, the prosecutor up to his eyes in pre-trial motions filed in the return mail should not despair. What is perceived to be an opening salvo may well be an adversary's best shot.

The most likely ground for defense counsel to wage a fight is on the challenge of the state's evidence. The probable cause for seizure, the execution of the warrant, and the chain of custody are all likely to be challenged by defense. Careful pre-investigation and pre-trial preparation by the prosecutor, however, can make these potential trouble spots matters of stipulation rather than agonizing conflict.

Where the defendant is accused of false submission of data, defense counsel is likely to take a different tack. There is likely to be an attempt to show that the data are not false, but "incorrect," that it reflects only a very small portion of the total information required by the government and should therefore be disregarded. Conversely, there may be an argument that there is selective prosecution, through an attempt to demonstrate just how common the reporting error is among persons not subjected to criminal investigation.

The economic motivation or background of every so-called "mistake" must be carefully examined. The failure to underscore positive reasons for omissions or falsified data may create a reasonable doubt as to guilt.

VI. TOXIC WASTE CASES--THE POLICY CONSIDERATIONS

A. Introduction

Toxic waste cases, for a variety of reasons, represent a unique genre in the prosecutor's portfolio: (1) the novelty of prosecuting polluters; (2) the cost of prosecution; and (3) public interest in prosecution. Each of these factors has strong bearing on the initiation and conclusion of cases, target selection, and sentencing.

1. Target Selection. The most important analytical question with regard to target selection is, "What danger does defendant's action pose to the community?" Where actual danger is perceived in the continuation of defendant's actions, there is no choice but to pursue. Considerations of likelihood of

success, cost, and public support mean little where a real danger to the community is found to exist.

Where immediate or actual danger does not exist, then other factors may be given weight. A determination must be made of the likelihood of success given either existing or available resources. Evaluation of outcome must be a continuous process. There is neither glory nor deterrence in acquittal. In the case of new units, which focus on hazardous waste violations, the establishment of a winning track record is of the utmost importance.

In matters which rely solely on an environmental offense for a theory of prosecution, as opposed to false data disclosure or more traditional crimes, constant attention must be focused on elements of recklessness, industry practice, custom, and usage. The difficulty in proving criminal intent must be measured. Is the community better served by the prolonged investigation of a single firm or a series of less significant cases? Are the two types of prosecutions necessarily mutually exclusive? The credibility gained from a string of victories is not to be underestimated. In some instances the decision of whether to pursue a civil or criminal sanction will be dispositive of issues of target selection.

Public interest in the prosecution of toxic waste cases must be cultivated. If the activity of the target has a pervasive community impact, that factor must be given added consideration. In sum, the normal bases of analysis used in other prosecutions are not as easily employed when it comes to toxic waste prosecutions. Faced with a homicide of unknown origins, there is no choice but to pursue. Faced with an apparently illegal waste spill, there are other considerations that need to be taken into account: how large is the spill; what is the likelihood that it was a true accident; that it will happen again; what are available resources?

2. Sentencing. Many of the same considerations taken into account in target selection should be given weight at the time

of sentencing. The question of "go to jail" or "pay \$200 and advance to go" is one which is familiar to prosecutors. The degree and willfulness of harm and the length of time that the practice continued should determine the prosecutor's position at sentencing.

The corporate defendant presents a different set of considerations. Fines, unless exceptionally heavy, will be regarded as a cost of doing business. Four alternative types of sentences should be considered: (1) probation--compliance programs; (2) plant shut-downs; (3) quo warranto proceedings; and (4) RICO.

Probation conditioned upon a monitoring program should be a sentencing recommendation as a matter of course. The probationary period should be a long one. The corporate defendant should be made to pay the cost of monitoring. It is suggested that the court select an outside expert to prepare periodic reports of the progress made by the corporate defendant.

An increasingly popular sentence is plant shut-down. Courts in Pennsylvania and New Jersey have ordered plant closures for a period of time commensurate with the economic gain realized by the corporation as a result of its illegal activity. A quo warranto proceeding, or dissolution of the corporate entity, is the logical extension of a plant's shut-down. It is a reasonable step to be taken against a recalcitrant recidivist corporation. The ability to do business in a state is a privilege that is bestowed--it may be removed. A cautionary note--quo warranto is usually considered a civil proceeding. In jurisdictions where the prosecutor has authority for criminal cases only, he or she may not have standing to bring a quo warranto petition in an official capacity.

As noted previously, the federal, and most state, RICO statutes provide for the confiscation of property gained through the illegal operations of so-called legitimate

businesses. To date, these provisions have not been employed in hazardous waste prosecutions. RICO is a new frontier of law enforcement, which must still be explored--carefully.

No toxic waste sentencing recommendation should be made without the filing of a written memorandum of allocution. It should include expert documentation of the nature of the crime, community risk, and evidence of willfulness. The memo should also note the more mundane--that the defendant should bear the full cost of a successful prosecution.

Once the memorandum is filed, it is a public record--a fact that will be considered important both by the judge and defendant. The memorandum should be seen as a permanent record of the defendant's guilt, the harm inflicted upon the community, and the cost of that harm.

VII. CONCLUSION

Until recently, abuse of our environment stood relatively low on the scale of behavior to be dealt with in our criminal courts. Unlawful dumping of hazardous waste is a particularly condemnable and harmful form of environmental abuse, which we recognize as having direct and harmful impact on the health and well-being of our people. This operational guide will, it is hoped, assist investigators and prosecutors in their developing efforts to contain and prosecute such unlawful activity.

ENDNOTES

¹Ballard Jamieson, "Criminal Enforcement of Environmental Laws" (unpublished paper taken from an article prepared for The Legal Times of Washington, D.C.).

²See Federal Water Pollution Control Act, Toxic Substance Control Act, Clean Air Act, Resource Conservation and Recovery Act, Noise Control Act, Oil Pollution Control Act, as well as parallel state legislation.

³See Model Penal Code § 211.2.

⁴Model Penal Code Comment: (T.D. No. 9, p. 86).

⁵Sheldon S. Toll, Pennsylvania Crimes Code Annotated, The Lawyer's Cooperative Publishing Co., Rochester, New York (1974).

⁶Ibid.

⁷Joan W. Beauch, "Criminal Sanctions Against Corporate Officials," unpublished monograph quoting Bazelon, Risk and Responsibility, 75 A.B.A.J. 1066 (1979).

⁸John M. Bray, "Air and Water Act Enforcement Problems," The Business Lawyer, Vol. 34, January, 1979, p. 705. Model Penal Code Comment (T.D. No. 8, p. 122).

⁹See this manual--Statute of Limitations.

¹⁰Jeff Atkinson, "Racketeer Influenced and Corrupt Organizations," Journal of Criminal Law, Vol. 69, No. 1, pp. 1-18 (1978).

¹¹Atkinson, p. 8.

¹²U.S. v. Field, 432 F. Supp. 55 (S.D.N.Y. 1977).

¹³See 18 Pennsylvania Statutes, § 911(f).

¹⁴Elmer Smith, "Waste Firm Head Guilty of Bribing Two at Dump," Philadelphia Bulletin, July 9, 1980, p. 9. Two city land fill employers received more than \$50,000 in bribes from waste disposal firms.

¹⁵Kit Konolige, "Probe Prompts Piszeh to Move Paul's," Philadelphia Daily News, July 11, 1980 p. 3. Edward Piszeh moved the Corporate headquarters of Mrs. Paul's Kitchens from the city of Philadelphia in response to a grand jury investigation that had made the "corporation feel unwelcome." Mrs. Paul's quality assurance manager was arrested on charges

of tampering with equipment that measured water fees and effluents at a Philadelphia plant. The loss to the city of Philadelphia was 500 jobs.

¹⁶House Committee on Interstate and Foreign Commerce, Subcommittee on Oversight and Investigation, Hazardous Waste Disposal, U.S. Government Printing Office (1979) p. 5.

¹⁷43 F.R. 58969 (December 18, 1978).

¹⁸Manifest systems are currently in operation in the states of Maryland, California, Texas, Kansas, Oklahoma, Minnesota, and Illinois. Legislative approval has been obtained in Pennsylvania. Eventually every state will either have its own system or will have one operated for it by EPA.

¹⁹Section 1004 (12) of RCRA.

²⁰Subcommittee on Oversight and Investigations, Hazardous Waste Disposal, p. 41.

²¹One example should suffice. New Jersey records show that 128,000 pounds of waste left the state for a dump site in Pennsylvania. The Pennsylvania site claims never to have received the shipment. Philadelphia Inquirer, September 23, 1979, p. 104.

²²Prosecutors and investigators should note that a successful probe of one point should, of necessity, eventually lead to every star in the constellation.

²³New Jersey Attorney General's Office, Proposal to Fund Northeastern Region Hazardous Waste Interstate Coordination Committee, submitted to LEAA, 1980.

²⁴Gregory Sakowicz, Investigative Techniques Re: Chemical Waste Disposal (unpublished speech, 1980) New Jersey Toxic Waste Investigation and Prosecution Unit.

²⁵Ibid.

²⁶Michael Mustokoff, The Use of Search Warrants in the Investigation of White-Collar Crime, Washington, D.C.: U.S. Government Printing Office (1980), p. 9.

²⁷Vernon Loeb, "U-2's Spy a Domestic Prey, Toxic Dumpers," Philadelphia Inquirer, October 23, 1979, p. 1.

²⁸Although the terms wiretapping and bugging are often employed interchangeably, they are not the same. Wiretapping refers to the interception and recording of conversation by wire (telephone) without the consent of the participants.

Bugging refers to the interception and recording of oral communications also without the consent of the participants. See Ronald Goldstock and Robert Blakey, Techniques in the Investigation and Prosecution of Organized Crime, Washington: Government Printing Office (1978).

²⁹See Blakey and Goldstock.

³⁰For the use of search warrants in the investigation of white-collar crime, see generally Mustokoff, op.cit.

³¹See Mustokoff, Ibid.

³²See In Re Investigation before April 1975 Grand Jury, 531 F.2d 600 (D.C. Cir. 1976); In Re Taylor, 567 F.2d 1183 (2d Cir. 1977).

³³See Cole v. U.S., 329 F.2d 437 (9th Cir. 1964); U.S. v. Fayer, 523 F.2d 661 (2d Cir. 1975).

³⁴See Hoffman v. U.S., 341 U.S. 479 (1951).

³⁵In Re Grand Jury Investigation (Sun Oil Company), 599 F.2d 1224 (3d Cir. 1979)

³⁶See In Re Grand Jury Proceedings (Duffy), 473 F.2d 840 (8th Cir. 1973).

³⁷See Samuel Miller, "Corporate Criminal Liability: A Principle Extended to Its Limits," Federal Bar Journal, Vol 38:49, Spring 1980.

³⁸See 2.07 Model Penal Code.

³⁹Miller, Ibid.

⁴⁰See e.g., U.S. v. Empire Packing Co., 174 F.2d 16, 7th Cir., cert. denied 337 U.S. 959.

⁴¹U.S. v. George F. Fish, Inc., 154 F.2d 798 (2nd Cir.), cert. denied, 328 U.S. 869, (1946).

⁴²U.S. v. Thompson Powell Drilling Co., 196 F. Supp. 571 (N.D. Tax 1961). Reversed on other grounds 307 F.2d 120, (5th Cir. 1962).

⁴³See Standard Oil Co. v. U.S., 307 F.2d 120 (5th Cir. 1962). See e.g., U.S. v. Cadillac Overall Supply Co., 568 F.2d 1078, 1090 (5th Cir. 1978); U.S. v. Hilton Hotel Corp., 467 F.2d 1295 (10th Cir. 1972).

⁴⁴C.I.T. Corp v. U.S., 150 F.2d 85 (9th Cir. 1945).

⁴⁵U.S. v. Armour and Co., 168 F.2d 342 (3rd Cir. 1948).

⁴⁶St. Johnsbury Trucking Co. v. U.S., 220 F.2d 393 (1st Cir. 1955).

⁴⁷See Melrose Distillers, Inc. v. U.S., 359 U.S. 271 (1958); N.Y. Bus. Corp. Law (McKenney's 1963) § 906(b)(3) providing for survival of dissolved corporation's liabilities for three years.

⁴⁸BNA Washington Memorandum, January 29, 1980.

⁴⁹See U.S. v. Park, 421 U.S. 658 (1974); U.S. v. Dotterwick, 320 U.S. 277 (1943). Daniel F. O'Keefe and Isley C. Willard, "Dotterwick Revisited--Criminal Liability Under the Federal Food, Drug and Cosmetic Act," Food Drug and Cosmetic Journal, Vol. 31, No. 2 (February, 1976).

⁵⁰ As a matter of criminal pleadings, where an individual is to be charged for his activity on behalf of a corporation the relation of the defendant to the corporation must be stated clearly in the indictment. See People v. King, 283 N.E.2d 294 (1972). The prime focus of enforcement activity must always be the individual.

⁵²Model Penal Code Comment [T.D. No. 4 p. 121].

⁵³See Section 2.01 Model Penal Code.

⁵⁴David P. Curnow, "Economic Crimes: A High Standard of Care," 35 Fed.B.J.21 (1976).

⁵⁵U.S. v. Natelli, F.2d, (2d Cir. 1975).

⁵⁶Curnow, id.

⁵⁷This should be contrasted with "careless disregard" which has been held not to rise to the level of criminal intent. United States v. Vitrello, 363 F.2d 240 (3d Cir. 1966); United States v. Benqimina, 499 F.2d 117 (8th Cir. 1974); United States v. Gurtner, 474 F.2d 297 (9th Cir. 1973).

⁵⁸United States v. Egenberg, 441 F.2d 441 (2d Cir. 1971); United States v. Benjamin, 328 F.2d 854 (2d Cir. 1968); United States v. Wilson, 500 F.2d 715 (5th Cir. 1974); United States v. Luxenberg, 374 F.2d 241 (6th Cir. 1967); Logsdon v. United States, 253 F.2d 12 (6th Cir. 1958); United States v. Reicin, 497 F.2d 563 (7th Cir. 1974); United States v. Kaczmarek, 490 F.2d 1031 (7th Cir. 1974); United States v. Stevison, 471 F.2d 143 (7th Cir. 1972); United States v. Henderson, 446 F.2d 960 (8th Cir. 1971); Irvin v. United States, 338 F.2d 770 (9th Cir. 1964); Babson v. United States, 330 F.2d 662 (9th Cir. 1964);

Elbel v. United States, 364 F.2d 127 (10th Cir. 1966); West v. United States, 68 F.2d 96 (10th Cir. 1933).

⁵⁹United States v. Frank, 494 F.2d 145, 143 (2d Cir. 1974); United States v. Benjamin, 328 F.2d 854 (2d Cir. 1968).

⁶⁰United States v. Egenberg, 441 (2d Cir. 1971). Also referred to as "studied ignorance" in narcotics prosecutions. See United States v. Joly, 493 F.2d 672 (2d Cir. 1974), citing Turner v. United States, 396 U.S. 398 (1970); and Leary v. United States, 395 U.S. 6 (1969).

⁶¹Stone v. United States, 113 F.2d 70 (6th Cir. 1940); United States v. Meyer, 359 F.2d 837 (7th Cir. 1966); United States v. Schaefer, 299 F.2d 625 (7th Cir. 1963).

⁶²Kaplan v. United States, 229 F.2d 389 (2d Cir. 1955); Slakoff v. United States, 8 F.2d 9 (3d Cir. 1925).

⁶³See Rumely v. United States, 293 F.2d 532, cert. denied 263 U.S. 713 (1960).

⁶⁴See United States v. Ross, 92 U.S. 281 (1875).

⁶⁵See Prudential Life Insurance Co. v. Glasgow, 208 F.2d 908, (1953). Henry B. Rothblatt, Handbook of Evidence for Criminal Trials (Englewood Cliffs, New Jersey: Prentice Hall Inc., 1965).

⁶⁶See Allen v. United States, 164 U.S. 492 (1896); 20 Am. Jur. §293.

⁶⁶Two states, South Carolina and Wyoming, impose no time limitations on the trial of criminal cases. Statutes of limitation are privileges. They are matters of grace and not fundamental constitutional rights.

⁶⁷See Model Penal Code § 1.06.

⁶⁸See Model Penal Code, § 108.

⁶⁹Model Penal Code Commentary: (T.D. No.5) p. 19.

⁷⁰See U.S. v. Toussie, 280 F.Supp. 4734 (1967).

⁷¹See U.S. v. Kissel, 218 U.S. 601 (1910).

⁷²See note, Statute of Limitations in Criminal Law, 102 U. of Pa. Law Rev. 630, 644 (1954).

⁷³See People v. Strait, 52 Ill. App.3d 599, 367 N.E. 2d 768 [1977].

⁷⁴See Commonwealth v. Shelhorse, 252 Pa. Super. 475, 381 A.2d 1305, (1977).

⁷⁵See e.g., 18 Pa. C.S. §108(f).

⁷⁶See Ross v. U.S., 349 F.2d 210, (D.C. Cir. 1965).

⁷⁷Marion v. U.S., 404 U.S. 307, 324, 1971.

⁷⁸G. Okermaier, "Special Aspects of Litigating White-Collar Criminal Cases," Ligation, Vol. 6 No. 3, Spring 1980, p. 15.

⁷⁹The calculations and processes used in reaching these conclusions must be testified to in detail. The expert must rule out other factors which might cause the same or similar results.

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