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A CASE FOR CRIMINAL ENFORCEMENT OF FEDERAL ENVIRONMENTAL LAWS

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A CASE FOR CRIMINAL ENFORCEMENT OF FEDERAL ENVIRONMENTAL LAWS

When you wish to produce a result by means of an instrument, do not allow yourself to complicate it by introducing many subsidiary parts, but follow the briefest way possible, and do not act as those who when they do not know how to express a thing ... proceed by a method of circumlocution and with great prolixity and confusion.

-Leonardo da Vinci¹

INTRODUCTION AND SYNOPSIS

The result we wish to produce is obviously improved environmental quality, perhaps even the lofty objective of "productive and enjoyable harmony between man and his environment"² Our instruments, at least within the scope of this article, are "the fine quilllets of the law",³ but any logical person considering the past two decades of federal environmental regulation and enforcement, the present "incredibly complicated mix of environmental laws at the national level...",⁴ and the complications imposed by federalism⁵ and federal facilities⁶ would have to conclude that we have certainly failed to follow da Vinci's admonition to keep it simple. This article goes one step past these observations to conclude that not only have we simply failed to keep it simple, but we have also, by deluding ourselves into believing that the differences between civil and criminal enforcement are little more than mere procedural distinctions surrounding the differing burdens of proof⁷ and that criminal enforcement is so inherently difficult and time consuming that

It is not worth the trouble,⁹ unnecessarily complicated our federal system of environmental enforcement and retarded its maturation.⁹

The underutilization of available criminal enforcement provisions has not gone unnoticed, at least from the perspective of the efficient utilization of legal resources, and the Land Division of the Department of Justice has even issued a formal directive requiring that "[w]hen both civil and criminal actions are possible for a single statute, a criminal proceeding should generally be brought and resolved before a civil action,"¹⁰ unless protection of public health or preservation of the environment necessitates injunctive relief.¹¹ The Environmental Protection Agency is also "steadily increasing its commitment to environmental enforcement,"¹² and statistics on enforcement actions show an increased emphasis on criminal enforcement.¹³ It is the purpose of this paper to provide appropriate legal and logical foundations to support ~~the~~ ^{the} observed increase in the number of environmental cases resolved by criminal enforcement of federal statutes and to illustrate that because of its inherent simplicity and retributive/deterrent value, ~~criminal~~ criminal enforcement, particularly against responsible individuals, ~~is~~ is an essential tool of environmental enforcement which should always be considered early in the enforcement process. Toward that end ~~we~~ ^{we} will - with the benefit of a brief consideration of the philosophy of environmental enforcement and a brief

^{Con't}
discussion of problems recently encountered in civil enforcement actions - examine the historical development and the present judicial climate surrounding the criminal enforcement provisions of the principle federal environmental statutes. We will then evaluate potential affirmative defenses and procedural and evidentiary concerns in an effort to demonstrate, through comparison to civil enforcement and analogy to enforcement under other general welfare statutes, that the perceptions and legal conclusions upon which the preferences for civil remedies have been based are largely illusory. This conclusion will be supported by illustrations of three specific situations, those involving the midnight dumper, the unrepentant permit holder and federally owned or operated facilities, in which enforcement of federal criminal statutes is not merely the sanction of choice but the only effective sanction. Theses, (G.C.)

PHILOSOPHIES OF ENVIRONMENTAL ENFORCEMENT

While no discussion of the nature of society's actions to solve problems, real or imagined, can be complete without some understanding of the jurisprudential underpinnings of our decision making processes, too extensive a consideration may destroy our focus and bog us down in the infinitely ponderable question of the distinction, if any, "between what law is and what it ought to be."²⁰ For simplicity we shall assume realistic validity of the underlying statutory schemes and

limit our philosophical introduction to a discussion of the assumptions underlying conclusions about the relative merits and appropriate uses of civil and criminal enforcement.

The Historical Perspective

The appealing simplicity of the use of criminal sanctions under modern federal environmental law, specifically the Air Quality Act of 1967, was recognized as early as 1968,²¹ but it was not long before commentators began to condemn the retributive nature and the cumbersome procedural aspects of criminal penalties and to suggest the almost exclusive use of civil penalties instead.²² Civil penalties were, the commentators argued, essentially economic and, therefore, better suited to penalize undesirable actions which were essentially economic and in which the guaranteed rights of criminal procedure were simply unnecessary baggage.²³ In the early 1970's these essentially practical arguments for exclusive or nearly exclusive civil enforcement were weakened somewhat by the unexpected effectiveness of the resurrection of the Refuse Act of 1899.²⁴

The Refuse Act (actually the common name for section 13 of the Rivers and Harbors Appropriation Act of 1899)²⁵, was originally part of a statutory scheme intended to protect the navigability of the nation's waters and allow in rem actions for the removal of wrecks and other hazards to navigation.²⁶ Misdemeanor criminal sanctions²⁷ and reward or "qui tam"

provisions²⁰ were included in the act, presumably to aid in enforcement and deter the deliberate introduction of refuse into the navigable waters of the United States, but in the late sixties and early seventies the misdemeanor criminal sanctions were used effectively to punish pollution of navigable waters by some very large industrial concerns,²¹ even though the "refuse" introduced was not a direct hazard to navigation.²⁰ At the time, commentators, principally those supporting civil penalties, attributed the success of criminal prosecutions under the Refuse Act to the fact that no mental element was required by the statute.²¹ This made criminal prosecution simple but, in their opinion, not worthy of pursuit because the penalties under the act were not the severe economic sanctions necessary to deter large corporate polluters.²²

The Liberal/Utilitarian Approach

After the early successes of criminal enforcement under "that sparkling innovation in antipollution legislation of the McKinley Administration,"²³ were stymied by the passage of the Federal Water Pollution Control Act (now commonly referred to as the Clean Water Act)²⁴ and philosophical arguments supporting civil enforcement for all economic legislation including environmental laws came increasingly into vogue,²⁵ criminal penalties were generally rejected as inappropriate sanctions which involved unnecessary conclusions about the morality of conduct which was principally economic in nature.²⁶

Unfortunately for effective criminal enforcement, this liberal/utilitarian approach to environmental enforcement, which rejected moral judgments associated with criminal law and substituted for them civil determinations of utility,³⁷ prevailed while most of the statutory and administrative schemes for the control of air and water pollution were developed.³⁸ Only after the great hazardous waste "scare"³⁹ reawakened interest in criminal enforcement at the federal level⁴⁰ did Congress enact and then amend The Resource Conservation and Recovery Act, The Comprehensive Environmental Response and Compensation Act, The Clean Water Act and The Toxic Substances Control Act⁴¹ to create what most wanted to believe was a "cradle to grave" scheme for control of toxic substances.⁴²

But criminal enforcement was never totally without its champions. One of the best demonstrations of a consistent political will for criminal enforcement of environmental laws is the Congressional reaction to the Supreme Courts formalistic resolution of a criminal prosecution under the 1970 version of The Clean Air Act. In Adamo Wrecking Co., v. United States ⁴³ the Supreme Court narrowly construed the term "emission standard" under the act thereby frustrating the criminal prosecution of Adamo Wrecking for asbestos related crimes.⁴⁴ Congress soon thereafter amended The Clean Air Act to prevent such formalistic outcomes in the future.⁴⁵ Congress was apparently determined to enforce environmental statutes

through the use of criminal sanctions, and the prosecutors and the courts eventually began to get the message.⁴⁶ Recent amendments to other environmental statutes and proposed legislation are sending the same message.

The Retributive Approach

Congress was not satisfied with merely closing loopholes in the existing environmental statutes.⁴⁷ To enhance the pervasive scheme described above, Congress continues to fine tune the principle environmental statutes to enhance effective criminal enforcement by both substantive changes to the nature of the crime⁴⁸ and increased penalties, particularly for repeat offenders.⁴⁹ The extensive criminal penalties under the Resource Conservation and Recovery Act were added by the 1984 amendment⁵⁰ and the Superfund Amendment and Reauthorization Act of 1986.⁵¹ The criminal penalties, under the Comprehensive Environmental Response, Compensation, and Liability Act, for failure to report releases of hazardous substances were created by the Superfund Amendment and Reauthorization Act of 1986⁵² and The Asbestos Hazard Emergency Response Act of 1986⁵³ was clearly an effort to get the substantial criminal enforcement provisions of the Toxic Substances Control Act focused on that substance.⁵⁴

But the latest amendments to the Clean Water Act are perhaps the piece de resistance of criminal enforcement.⁵⁵ In the 1987 amendments the distinction between negligent and

knowing violations has been made clear,³⁴ criminal penalties have been significantly increased,³⁷ and a crime of knowing endangerment has been added.³⁸ The 1987 amendment also delineates a new type of disposal offense by prohibiting the unpermitted introduction of hazardous substances or pollutants into sewer systems or publicly owned treatment works. This change alone would seem at first blush to foreclose yet another environmentally unsound method of disposing of hazardous waste, but the new provisions contain significant limitations. The introduction of "the pollutant or hazardous substance" will only be punishable if the introduction "causes the treatment works to violate any effluent limitation or condition in [its] ... permit."³⁹ While it does not take much imagination to foresee the practical difficulties involved in investigating and proving such an offense,⁴⁰ criminal enforcement efforts are already underway.⁴¹ Fortunately, other environmental statutes do not present such problems if the resources for adequate investigation are available.

From recent developments it appears that these practical resources will be increased. In order to implement the extensive criminal provisions of the 1984 amendments to the Resource Conservation and Recovery Act, The Department of Justice has, as required by statute,⁴² delegated full law enforcement authority to the Environmental Protection Agency's National Enforcement Investigation Center Special Agents,⁴³ and other federal enforcement agencies have also begun to

increase criminal investigation efforts in the environmental area.⁴⁴ In order to prosecute these cases effectively and "convey a message of serious intent to the regulated community" the Department of Justice has created an Environmental Crimes Section within its Land and Natural Resources Division.⁴⁵ Such practical concerns are not without value to our evaluation of the philosophical basis of criminal enforcement. It has long been persuasively argued that there is no better indicator of the true political will of a society than the allocation of its law enforcement assets.⁴⁶

The Jurisprudential Conclusions

What is interesting to note in light of this paper's postulate is that even though the recent amendments discussed above have added emphasis to criminal enforcement, both the Clean Air Act and the Clean Water Act, the principle federal environmental statutes in effect during the period of criminal enforcement's intellectual disfavor, contained misdemeanor criminal penalties. However, these provisions, despite early successes with prosecutions under the Clean Water Act,⁴⁷ never seemed to attract the prosecutorial interest due them.⁴⁸ The point is that: society, through its recognized processes, had already condemned polluting activities in violation of the statute as criminal.⁴⁹ A person of an essentially practical bent might boil down these two decades of discussions filled with high sounding jurisprudential rhetoric and debates about

economic law to a simple failure to enforce the retributive provisions of the statutes on the part of those duly appointed to do so.

As the courts have long recognized "the general unsuitability for judicial review of agency decisions to refuse enforcement,"⁷⁰ the decision(s) not to use criminal enforcement provisions is more political than jurisprudential. The relatively recent resurgence of criminal enforcement in what has been described as a period of general deregulation of private business (and some would say disregard for the environmental concerns)⁷¹ may be distillation of natural law concepts to their ultimate logical result,⁷² an enlightened utilitarianism which requires the moral behavior of the individual, as determined by society as a whole, to preserve the general welfare⁷³, or simply a political reaction to "... the growth of a compelling bipartisan public sentiment in favor of vigorous enforcement...."⁷⁴

Whatever the philosophical basis for increased criminal enforcement, we are beginning to see that civil enforcement is not the trouble free compliance procedure theorist have touted it to be,⁷⁵ and for unpermitted, unrepentant or federal polluters, civil enforcement may not provide effective sanctions. On the other hand, criminal sanctions can provide society with the simple and effective enforcement tools necessary to prove society's concern to potential offenders. This is particularly true when criminal enforcement is the only

practical sanction. We will look in detail at such cases below, but first we will make a more detailed examination of the problems recently encountered in civil enforcement under the existing statutes by which Congress hoped to successfully regulate all potential methods of the introduction of pollutants into the environment.⁷⁶

CONCERNS IN CIVIL ENFORCEMENT

We should first acknowledge that a rational and effective regulatory scheme is essential to both civil and criminal enforcement.⁷⁷ But because we tend intuitively to associate the development of a comprehensive regulatory scheme with civil enforcement,⁷⁸ we may overlook some of the shortcomings of civil enforcement.

The Limitations of Civil Enforcement

Reliance upon civil enforcement puts the burden of education in the regulatory scheme on the government agency - and its principle, society - not on the regulated "persons".⁷⁹ The apparent regulatory choice between statutorily created penalties is really only the manifestation of the much broader issue of who will bear the insult of ignorance or disregard of the law or the duly promulgated regulations which the courts have treated as synonymous.⁸⁰ There are two choices. Under an enforcement scheme which relies on warnings followed by escalating civil penalties, society will bear the burden of

pollution born of ignorance, real or feigned, but when criminal penalties are invoked, the corporate and natural persons responsible (for the corporate or governmental "person" may act only through its agents¹¹) may be held accountable for knowledge of and compliance with society's standards.

Recognizing this apparent inequity, proponents of civil enforcement hold up the significant financial penalties provided by statute¹² as the method by which wrongs committed by corporate and governmental bodies might be redressed,¹³ but such assertions may not survive closer scrutiny. As our regulatory schemes developed it became apparent that civil penalties, unless they are so extensive that operation of the regulated entity becomes economically impractical, may in reality be more license than sanction.¹⁴ The characterization of civil penalties as economic disincentives rather than legal sanctions breaches the sea wall of practicality which holds back a veritable ocean of economic theory surrounding the "use of market forces to achieve environmental goals with minimal economic cost."¹⁵

We may, however, avoid a lengthy discourse on such theories by noting that the discontent with legalism which has led some to propose or embrace complex economic theories,¹⁶ often ignores the facts of economic and regulatory life.¹⁷ The observation that our economy is a hybrid of many inconsistent economic models is not a new one,¹⁸ but as environmental regulation becomes more pervasive distinctions in the manner in

which certain groups or types of polluters react to economic disincentives will become more and more pronounced. Some major sources of pollution such as - private and public utilities, federal activities and contractors, and socially important but marginally profitable high pollution industries can not rationally be expected to adhere to traditional economic models, and may in fact ignore some laws and regulations altogether. Because we are not yet ingenious enough to decipher these complex politico-economic relationships, there is often no viable economic alternative, and some form of "command and control" regulation would appear to be essential.¹⁰

In response to this dilemma injunctive relief and its administrative equivalent, compliance orders, have been created by statute and employed to ensure that corporate or government "persons" and their employees comply with law or regulation,¹¹ regardless of economic advantage. But the use of legal orders to compel compliance has encountered two very significant problems. First, injunctive relief is not a realistic alternative for certain activities, for example public utilities and certain essential functions of the federal government,¹² and second, efforts to obtain injunctive relief or to gain approval of regulations which permit civil enforcement often result in delays of several years before any penalties are imposed.¹³

Some have argued that these philosophical and practical

drawbacks to civil enforcement are temporary, lasting only until societal and economic pressures ensure voluntary compliance²³ and that they are far outweighed by the procedural simplicity of a civil enforcement system in full flower.²⁴ If as a practical matter this were true, perhaps criminal penalties would not be a viable alternative, but in the civil enforcement arena it seems that Murphy's second law always prevails: "Nothing is ever as simple as it seems."²⁵

The Procedural Difficulties in Civil Enforcement

We have already noted the practical problems caused by lengthy civil actions and the limits of reason on injunctive relief, to these the Supreme Court in Tull v. United States has added, at least under the Clean Water Act, the procedural burden of trial by jury.²⁶ It is indeed interesting to note that avoidance of the jury and its attendant procedural difficulties was one of the early practical arguments for preference to civil enforcement.²⁷ Worthy of note is the observation that the court in Tull analogized to the criminal law's general provision for sentencing by the judge to avoid a right to trial by jury on the amount of the civil penalty.²⁸ While valid criticisms of the of the civil enforcement systems do not necessarily validate emphasis on criminal enforcement, the question we must answer is this: If criminal and civil enforcement are equally difficult or simple to implement should we not chose the enforcement technique with the best deterrent

potential? Having asked, we turn to the principle enforcement statutes available, and examine the potential affirmative defenses, and procedural and evidentiary concerns to determine if criminal enforcement is indeed simple enough to be worthwhile.

PRINCIPLE FEDERAL ENVIRONMENTAL STATUTES

As they have developed historically the principle criminal provisions may be divided into five categories:

1. Those designed to directly protect the safety of individuals;

These provisions in the Resource Conservation and Recovery Act and The Clean Water Act are commonly called knowing endangerment provisions.⁹⁹ The Clean Air Act, possibly because of its technocratic approach of computerized modeling against ambient standards as a method of enforcement, does not contain such a provision,¹⁰⁰ but the most recent revisions proposed in Congress include a "knowing endangerment" crime.¹⁰¹

2. Those designed too ensure compliance with an administrative regulatory program;

For example, The Clean Water Act,¹⁰² The Clean Air Act,¹⁰³ The Ocean Dumping Act,¹⁰⁴ and the Resource Conservation and Recovery Act¹⁰⁵ contain criminal provisions prohibiting the knowing conduct of regulated activities without a permit and "knowing" and/or "willful" permit, and "interim

status" violations.¹⁰⁶ The Clean Water Act, like its ancestor the Refuse Act of 1899, also authorizes punishment for such activities even if they are committed through negligence.¹⁰⁷

3. Those designed to protect specific places or things;

The Endangered Species Act¹⁰⁸ prohibits the "taking" of an endangered species or destruction of its habitat.¹⁰⁹ The Prevention of Pollution From Ships Act¹¹⁰ will protect the high seas upon implementation of the International Convention for the Prevention of Pollution from Ships (MARPOL Protocol).¹¹¹ The purpose of The Safe Drinking Water Act is obvious from its common name,¹¹² and various other statutes protect the public land both from some uses and users under regulations implemented by the administering agency.¹¹³

4. Those designed to deal with specific hazardous substances;

The Toxic Substances Control Act contains a provision which prohibits acts in violation of administrative regulations concerning certain substances found by the agency or determined by Congress to be toxic.¹¹⁴ The Resource Conservation and Recovery Act requires regulation of "hazardous waste."¹¹⁵ The Federal Insecticide, Fungicide and Rodenticide Act is focused directly on control of these substances.¹¹⁶ The Atomic Energy Act prohibits unauthorized handling of radioactive materials.¹¹⁷ Other specific legislation requiring

regulation of the disposal of "health care facility waste" has been strongly supported in Congress.¹¹⁸

5. Those designed to aid in enforcement;

These provisions commonly prohibit knowing submission of false statements to regulatory agencies and make criminal the failure to properly maintain the records required by law or regulation,¹¹⁹ and for those media in which immediate containment or clean up is technologically possible notification of the discharge or release of certain substances is required.¹²⁰

It might be argued intuitively that civil enforcement could reach these same ends¹²¹ but civil enforcement actions cannot benefit from the full panoply of criminal statutes. These general federal criminal offenses serve two purposes. Practically, because juries, and perhaps even defense lawyers,¹²² are more comfortable when traditional criminal offenses are charged, they make prosecution simpler and, therefore, guilty pleas are more likely, but, just as importantly, they serve as philosophical notice that a felony is a felony whether Congress adopted it from the common law or created it out of concern for modern technology as a threat to the environment.

OTHER FEDERAL CRIMINAL STATUTES

The following general criminal statutes have been or can conceivably be effectively utilized to simplify and improve

the enforcement process.

Aiding and abetting another in the commission of a criminal act¹²³ - This fundamental criminal statute allows participants at any stage of the environmental crime to be prosecuted as principals even if their participation is not the criminal act.¹²⁴

False claims against the government of the United States,¹²⁵ and theft or conversion of public monies¹²⁶ -- These statutes are particularly effective against contractors who file false claims for payments associated with the handling and disposal of waste generated by the federal government or clean up of hazardous waste sites under the Comprehensive Environmental Resource and Conservation Act.¹²⁷

Conspiracy¹²⁸ -- Almost every major criminal violation of environmental laws could logically be the object of a conspiracy and the offense is often charged both to support the presentation of the case by permitting the introduction of evidence that might otherwise be excluded as hearsay and to establish a story line of guilty knowledge and behavior.¹²⁹ The offense may also be utilized to enhance punishment as conspiracy is generally considered a separate offense.¹³⁰

False statement in any proceeding before any agency or department of the United State¹³¹ -- false statements in civil enforcement proceeding would also be criminal under these provisions,¹³² and felony punishment may also be available.¹³³

Mail and wire fraud¹³⁴ -- These statutes have been used to

prosecute environmental criminals who have systematically used the mails or electronic means, usually the telephone, to arrange contracts for purportedly legal transport, treatment or disposal of waste.¹²⁵

Obstruction of administrative proceeding¹²⁶ -- This statute has obvious application to permit proceeding, but may have increased value as hazardous waste facilities begin to face loss of their interim status under the Resource Conservation and Recovery Act (LOIS) program.¹²⁷ :

Perjury¹²⁸ -- This statute has specific application to judicial actions arising from civil enforcement or challenges to regulations,¹²⁹ but it is also effective in breaking down conspiracies to deceive grand juries, which is particularly important in the corporate context.¹³⁰

Contempt of court¹³¹ -- This statute has also been effectively used to assist in grand jury investigation,¹³² but the fact that "punishment for contempt of court and a conviction under indictment for the same acts are not within the protection of the constitutional prohibition against double jeopardy" may make contempt proceedings particularly useful when the criminal act also violates an injunction.¹³³

Federal Assimilative Crimes Act¹³⁴ -- This statute has limited territorial application, in that it applies only to geographic areas under exclusive federal jurisdiction, but it does allow for the dynamic application of state law to acts committed under such jurisdiction, and may, therefore, have

particular application to federal employees (military or civilian) who commit environmental crimes¹⁴⁵

In addition to these statutes of general applicability two other groups of arguably useful statutes, which would produce two disparate groups of criminal defendants, are interesting enough to warrant more extensive discussion. The first of these is the Racketeer Influenced and Corrupt Organizations Act (RICO).¹⁴⁶ Ever since control of the disposition of toxic waste became a major issue, there have been allegations that "organized crime" controls and profits from the business of hazardous waste disposal.¹⁴⁷ Some formal studies indicate that this is not the case,¹⁴⁸ finding instead that the "offending businesses . . . demonstrated fairly low organizational complexity."¹⁴⁹ In either case as disposal of waste becomes a more and more complex process¹⁵⁰ racketeering prosecutions are certain to be a part of the future of criminal enforcement in the environmental area.¹⁵¹

The second group of statutes is the Uniform Code of Military Justice (UCMJ).¹⁵² Under the General Article,¹⁵³ active duty personnel are subject to trial by court-martial for all non-capital federal crimes, including those acts made criminal by the Federal Assimilative Crimes Act.¹⁵⁴ Additionally, violations of orders concerning proper environmental practices could result in prosecutions under Article 92 of the code.¹⁵⁵ Given the fact that active duty personnel face not two, but, three potential forums, if

prosecutorial interest in federal facility compliance with environmental laws continues to increase, uniformed offenders are not likely to escape notice.¹⁵⁴

STATUTORY CONSTRUCTION

Having identified the potentially applicable statutes we can turn our attention to a generalized discussion of the judicial construction of environmental statutes and to what are commonly referred to as the elements of the offense as they support our thesis of the simplicity and effectiveness of criminal enforcement.

The Scope of the Statutes

Regrettably for persuasive presentation, efforts to impose criminal sanctions under environmental statutes which showed much promise, beginning with the sweeping interpretation given the criminal provisions of The Refuse Act,¹⁵⁷ have been at times unnecessarily complicated by formalistic constructions of certain provisions which limit the practical scope of the statute.¹⁵⁸ Sometimes narrow or formalistic constructions of the trial court are later corrected by a courts of appeal.¹⁵⁹ But, with the marked exception of United States v. Adamo Wrecking Co.,¹⁶⁰ on the occasions when formalism prevails on appeal, it is usually directed at the application of the statute to corporate or other "persons" created by legal fictions.¹⁶¹ The courts have even gone so far as to suggest, as this paper

does, the prosecution of the natural persons responsible for the criminal violation.¹⁴² If the broad interpretation given to the term "person" under the Resource Conservation and Recovery Act by United States v. Johnson & Towers Inc.¹⁴³ is a sign of the legal pattern which is emerging, the prosecution of the natural persons responsible for pollution will not face obstacles created by narrow statutory construction. Nowhere is this willingness of the courts to simplify the application of the statutes and leave the questions of guilt to the jury¹⁴⁴ more important or apparent than in the articulation of the mental element necessary for the commission of various environmental crimes.

The Mental Elements Required

Both the requirement for and the magnitude of criminal intent required for conviction under the various environmental acts has been a concern for nearly two decades.¹⁴⁵ During the resurgence of The Refuse Act,¹⁴⁶ commentators noted the strict liability standard imposed by the act,¹⁴⁷ terming enforcement of the act the rejection of the requirement for "scienter", or a knowing act,¹⁴⁸ This standard was not carried over into the criminal provisions of the 1972 version of The Federal Water Pollution Control Act, but the act did establish criminal penalties for negligent violations,¹⁴⁹ and the government enjoyed notable success prosecuting cases under that standard.¹⁷⁰ The 1987 amendments to the Clean Water Act

maintained the negligence standard, but, rephrased the criminal provisions to establish separate statutory subsections for "negligent" and "knowing" violations with an attendant increase in the severity of potential punishments for the latter, thereby deleting the concept of "willful" violations.¹⁷¹ While "willful" and "knowing" have been held to be nearly synonymous for purposes of public welfare statutes,¹⁷² this change is a sign of the developing consistency and associated simplicity in environmental criminal enforcement provisions.

Though the effective prosecutions of misdemeanors based on negligence have been an important part of the history of the Clean Water Act,¹⁷³ the other principle environmental statutes punish only a "knowing" offense.¹⁷⁴ Because, Congress has not seen fit to incorporate the negligence standard into other statutes,¹⁷⁵ and because the negligence offenses under the Clean Water Act are only misdemeanors,¹⁷⁶ it is the scope of the scienter requirement under the knowing standard which serves as the major distinction of criminal enforcement and to which we now turn our attention.

This issue has best been addressed in criminal cases enforcing the Resource Conservation and Recovery Act. Both United States v. Johnson & Towers, Inc. and United States v. Hayes Int'l. Corp. recognized the public health concerns addressed by the Resource Conservation and Recovery Act, but addressed the resolution of the issue in different ways.¹⁷⁷ The apparent difficulty in resolving the two cases may be more

procedural than substantive. Johnson & Towers Inc. sustained the government's interlocutory appeal of the dismissal of three counts of the indictments against two natural persons¹⁷⁰ after the accused corporation which employed the individual defendants pled guilty, while Hayes Int'l. Corp. reversed "judgments of acquittal notwithstanding the jury verdict" under the Federal Rules of Criminal Procedure¹⁷¹ in favor of both the named corporation and individual defendants employed by it. Because the decision in Johnson & Towers Inc. was one of preliminary statutory interpretation based only upon the bare assertions contained in the indictment, only Hayes Int'l. Corp. addressed directly the mensal element required in the light of evidence presented at trial.

It should be noted initially that in the Johnson & Towers Inc. case neither the trial court nor the Third Circuit Court of Appeals saw any legal bar to the individual defendants' culpability under a theory of "aiding and abetting,"¹⁷² the corporation's violations, but the appellate court went even further and reversed the dismissal of the counts alleging individual violations of the Resource Conservation and Recovery Act by giving a broad reading to the statutory term "person."¹⁷³ The court did not need to or intend to define the term knowing under the statute; the dicta focused on ensuring that each element of the allegation that the defendants "did knowingly treat, store and dispose of ...hazardous waste" was subjected to the same "knowing" standard not on defining that

knowing standard.¹⁰² Both courts of appeal relied on the same historic interpretation of "knowing or knowingly" under "public welfare statutes"¹⁰³ establishing regulatory programs. "[T]he government need prove only knowledge of the actions taken which constitute the elements of the offense and not knowledge of the statute forbidding them."¹⁰⁴ That both courts held that knowledge of the permit status is necessary for the offense of "knowingly transport[ing] ... hazardous waste ... to a facility which does not have a permit"¹⁰⁵ is not surprising given both courts recognition of the applicability of inferences and circumstantial evidence to proof of guilty knowledge.¹⁰⁶ The court in Johnson & Towers Inc. expressed this concept in general terms concluding that "triers of fact would have no difficulty whatever in inferring knowledge on the part of those whose business it is to know, despite their protestations to the contrary,"¹⁰⁷ and the court in Hayes Int'l. Inc. was even more explicit when it concluded that in light of the statutory record-keeping procedures necessarily associated with the legal transportation of hazardous waste "proving knowledge should not be difficult"¹⁰⁸

The Offense of Knowing Endangerment

It is particularly important to note that a similar rationale may be applied to the "knowing endangerment" provisions of the Clean Water Act and the Resource Conservation and Recovery Act.¹⁰⁹ It is logical to conclude that even though

these statutes authorize severe criminal penalties (a maximum of 15 years imprisonment and a \$250,000 fine for individuals) the government need not show that the defendant knew the act alleged to be criminal. The government need only show the elements of the lesser offenses plus the defendant's knowledge that the act alleged placed "another person in imminent danger of death or serious bodily harm"¹⁷⁰ Presumably because these offenses are treated so severely, both acts preclude prosecution based on allegations that the knowledge of another may be imputed to the defendant, but circumstantial evidence, including evidence that defendant affirmatively shielded themselves from actual knowledge may be utilized to prove this element.¹⁷¹

While extensive academic discussion of the mental element required may be an interesting exercise, it is not one in which defendant's facing felony punishment are likely to profitably engage,¹⁷² and the real concerns may be the philosophical questions about what ought to constitute a crime. The fact that defendant's are often convicted of both the environmental offenses and more conventional crimes requiring specific intent makes this conclusion even more compelling.¹⁷³ Assertions that the defendant believed that the requirements of the statute and its related regulatory scheme were being satisfied are better considered as affirmative defenses than as mental elements of the statute.¹⁷⁴

AFFIRMATIVE DEFENSES

Affirmative defenses may be subdivided into two types- those based on challenges to the regulations and those based on the conduct or actions of the defendant. As the first type of defense is generally a preliminary question for the trial Judge we will approach our discussion in that same sequence.

The Administrative Challenges

The common administrative law challenges in enforcement actions, both civil and criminal, may generally be divided into two categories - challenges to legislative rules, those issued under implied or explicit statutory authority, and challenges to interpretive rules, statements which advise the public of the agency's construction of the statute.¹⁷⁵ Though it is generally conceded that the courts will give greater deference to legislative rules, the difficulty lies in establishing which is which and to what extent either type of rule may be challenged during the criminal enforcement proceeding.¹⁷⁶

Because all the principle environmental statutes except the Toxic Substances Control Act¹⁷⁷ contain similar provisions which attempt to preclude review of agency actions after a relatively limited period of ninety or one hundred twenty days from issuance of a given regulation,¹⁷⁸ it would appear on first impression that the statutes and regulations create a "now or never" system under which court challenges to

regulations must be presented, if they are to be presented at all, months or even years prior to any civil or criminal enforcement action.¹⁹⁹ This observation is illustrated most dramatically by the all inclusive wording of the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act²⁰⁰ which, when viewed in the light of the extensive regulatory scheme envisioned²⁰¹ does not provide the courts with much of an opportunity to avoid direct confrontation with complex administrative law issues in civil enforcement actions. But as the discussion below concludes a more rational and less formalistic approach may be available in criminal enforcement proceedings.

This simple approach is made possible in part by the fact that the courts have seldom approached this issue from the criminal defendant's end of the bar, choosing instead to address only indirectly the extent to which Congress may constitutionally preclude review of agency rules in criminal enforcement actions, e.g. nullify by statute any rights defendants may have to challenge the validity of the agency regulations under which they are charged.²⁰² Unfortunately, as we will see below, this approach has also bogged down resolution of the "review preclusion issue" in questions of proper venue for review in civil cases²⁰³ or formalistic exercises in statutory construction in criminal cases.²⁰⁴

The major roadblock to a meaningful recognition of the

existing due process limits on affirmative defense preclusion and their effective application is the precedent established by Yakus v. United States, a 1944 case in which the Supreme Court rejected constitutional and procedural challenges to the extensive review preclusion provisions of the Emergency Price Control Act raised by the appeal of various criminal convictions under the Act.²⁰⁵ Because Yakus was a criminal case in which review of agency action was affirmatively precluded, it would nicely support our thesis if we could contend unabashedly that Yakus was decided correctly under administrative law and criminal procedure. Unfortunately, the confusion created by the case dates to the decision itself. Succinctly put, it was unclear, even in 1944, whether the decision in Yakus was a deferral to the "War Power" of Congress or an exposition of administrative law.²⁰⁶ Any protracted discussion of the extent of the "War Power" is obviously beyond the scope of this paper. It suffices to say that any suspension of procedural due process and other constitutional protection - if indeed review preclusion provisions operate to that end - based on the necessities of war making are likely to be subject to substantial criticism.²⁰⁷

Can it then be said that Yakus was/is correct as a determination of the constitutional limits on review preclusion when viewed, as it arguably must be, outside the light of the exercise of the "War Power"? As the dissent of Justice Rutledge points out in elegant understatement, "[t]he idea is entirely

novel that regulations may have a greater immunity to judicial scrutiny than statutes have" 208 This fundamental concept of limitation on review preclusion is so logical that it may have motivated Congress to later amend the "most onerous features of the Emergency Price Control Act". 209 Such concerns are particularly applicable to criminal proceeding, 210 but it is not difficult to conceive how the due process or even the "taking" clauses of the fifth amendment might be used to create similar concerns in civil proceedings under the federal environmental statutes. 211 As we shall see, this myriad of ways in which the issue of review preclusion may be framed presents the greatest difficulty in civil enforcement actions.

In Adamo Wrecking Co., v. United States the Supreme Court recognized, sub rosa, the need for limits on review preclusion articulated by Justice Rutledge. By substituting the Courts definition of "emission standard" for the agency's, the Court accepted, though admittedly without comment, the argument that at least one of the basic requirements for validity of legislative rules, statutory authority, cannot be avoided by congressional limits on judicial review. The interesting twist is that a persuasive argument can be made that the rule in question in Adamo Wrecking Co. was a long-standing interpretive rule entitled to the force of law under the very exclusive criteria also recognized by Professor Davis in his treatises on administrative law. 212 Regardless of outcome of a particular case, the failure of the Court to recognize and to articulate

standards for distinguishing between interpretive and legislative rules forms the basis for the confusion over the place, if any, for the legislative/interpretive distinction in determining the appropriate standard of deference to statutory review preclusion.²¹³

Perhaps because of this confusion, due process concerns have never been adequately addressed.²¹⁴ Although Congress is beginning to recognize that given the complexity of environmental regulations, the relatively brief periods provided prior to review preclusion may not be sufficient.²¹⁵ It is clearly not enough to simply chronologically extend the period prior to preclusion. Such provisions are certainly relevant in determining the adequacy of the opportunity to be heard, but they cannot be considered conclusive on the adequacy of due process.²¹⁶ The Environmental Protection Agency has attempted to avoid this issue, by denominating its own rules as either interpretive or legislative. If they are recognized by the courts, such classifications would virtually compel potential defendants to seek review of legislative rules immediately but allow post-enforcement challenges to site specific or clearly interpretive rules.²¹⁷ While such designations should be very helpful to civil enforcement, this approach suffers from one very serious flaw. The validity of such efforts can only be established after enforcement actions are begun.²¹⁸

Rather than embroil ourselves in this minutia of procedural due process under administrative law necessitated by

civil enforcement, it seems more efficient to avail ourselves of the standards of reasonableness generally utilized in early criminal prosecutions under environmental statutes²¹⁹ and later reaffirmed, though perhaps tangentially, in United State v. Hayes Int'l Corp.²²⁰ Review preclusion was not directly considered in the Hayes decision, but it is not difficult to see concern for fundamental due process issues of notice disguised as issues of "knowledge" under the statute²²¹ and rejection of the "mistake of law" defense with regard to ignorance of the applicable disposal regulations. In the end the court concluded that it was the defendant's "business to know" applicable regulations and to ensure compliance.²²² It is unlikely that such a clear result could be produced by a civil enforcement action.²²³ As further evidence of this conclusion, let us look more closely at other affirmative defenses.

The Mistake of Law

How was I supposed to know? -- was a frequent cry of defendants in the early days of environmental enforcement. In civil actions judges often mitigated what they saw as strict liability statutes by awarding nominal penalties,²²⁴ but under the criminal enforcement statutes the courts, relying on precedent established in the regulation of the transportation of dangerous substances and other pervasively regulated industries,²²⁵ have generally concluded that under

environmental statutes "[t]he principle that ignorance of the law is no defense applies whether the law is a statute or a duly promulgated and published regulation."²²⁴

As prosecutions based on this principle became more numerous, a wag, questioning the deterrent value of criminal enforcement, declared that the prosecutions of adultery and violations of environmental statutes had three things in common. "Enforcement is selective and erratic, and the consequences often are harsh."²²⁷ Despite its humorous appeal, selective prosecution, unless it is "deliberately based upon an unjustifiable standard,"²²⁸ is founded upon the questionable philosophical conclusion that if enforcement agencies are sufficiently derelict or if detection is particularly difficult society is somehow deprived of its right to expect compliance with the law.²²⁹ Additionally, while intellectual recognition of the potential for a valid "selective prosecution" defense is not uncommon the assertion of such claims has historically enjoyed little practical recognition in the courts, especially in felony cases.²³⁰ Interestingly enough, a perhaps more viable defense, "mistake of fact," recognized in the early days of criminal enforcement has lately been ignored. Let us examine the concept of mistake of fact founded in detrimental reliance upon third parties.

The Mistake of Fact

The United States Supreme Court has recognized the

validity of this defense. In an early Refuse Act case the Court held that the defendant corporation had been improperly denied its right to "present evidence in support of its claim that it had been affirmatively misled [by representatives of the Corps of Engineers] into believing that the discharges in question were not a violation of the statute."²²¹ Government attorneys are still keenly aware of this possibility. Representatives of the Department of Justice have recently been admonished against providing "legal advice" to potential criminal defendants.²²² Since claims of mistaken reliance will normally be decided as questions of fact,²²³ criminal enforcement actions conducted with even a modicum of common sense should not be unduly hampered.

Apparently, reliance on enforcement or permitting authority representatives is also a problem in the civil enforcement area, particularly when state and federal officials are attempting to obtain compliance from the same polluter.²²⁴ But as we shall see below, affirmative defenses, such as mistake of fact, may arise much more subtly in civil enforcement actions particularly when the regulatory scheme is a very complex one.²²⁵

The Special Defenses

In addition to the affirmative defenses discussed above, which are generally applicable to all environmental crimes, some special defenses applicable to the offenses involving "knowing

endangerment" ²²⁴ have been provided or at least hinted at by statute.²²⁷ While only the Resource Conservation and Recovery Act contains all the express provisions, they are likely to be grafted into other statutes in the future for two reasons. First, as we have already noted, environmental statutes seem generally to build on one another,²²⁸ and secondly, the provisions, with two marked exceptions, appear to simply state the obvious and relinquish refinement to case law development.

These marked exceptions warrant closer inspection. The statutes recognize consent of the person endangered as a defense providing "the danger and the conduct charged were reasonably foreseeable hazards of an occupation" or "medical treatment or medical or scientific experimentation" conducted by professionally approved methods and with the endangered person's consent.²²⁹ The statute attempts to shift the burden of proof, by a preponderance of the evidence, to the defendant. The issue of such manipulations of the historic reasonable doubt standards go far beyond environmental statutes.²⁴⁰ It is sufficient for our purposes to note the existence and necessity of resolution of the issue. The unique affirmative defense provisions of The Resource Conservation and Recovery Act also include a mention of the common law defenses under "concepts of Justification and excuse."²⁴¹ Because this provision may merely state the obvious, we will next consider in general terms this type of defense, which the courts will likely extend to all defendants.²⁴²

The Justification Defense

Assertions of justification or excuse as affirmative defenses sometimes present themselves as the concept of supervisory liability or its inverse, innocent obedience to instructions or orders. Obviously this situation immediately presents a conflict of interest between the employee, intent on invoking ignorant compliance with corporate (or federal facility)²⁴³ directives, and the corporate or federal activity intent on avoiding responsibility for the criminal acts of its servants.²⁴⁴ The courts have had little patience with corporate attempts to avoid criminal liability through allegation of lack of knowledge or by urging formalistic constructions of the statutes²⁴⁵ and appear just as ready to sustain convictions of individuals in the managerial hierarchy, sometimes relying on the doctrine of the "responsible corporate officer."²⁴⁶ Whether or not individual defendants may avail themselves of some sort of unknowing-obedience-to-instructions defense has been mired in discussions of the mental element necessary to commit specific offenses²⁴⁷ and has not been clearly addressed as an affirmative defense issue. Because active duty members of the armed forces have an affirmative legal duty to obey presumably lawful orders, prosecution of member of the military for environmental crimes may produce a resolution of this issue.²⁴⁸

The defense of justification or excuse may also take the

form of reliance on the natural occurrence or acts of third parties as the actual cause of the illegal release, discharge, or emission. Such a defense is already recognized in terms of civil liability for Superfund cleanups.²⁴⁹ But because it is often easier to convince the triers of fact to punish everyone who had a hand in an illegal activity than to convince them that blame may somehow be rationally or legally terminated, the defense of excuse based upon the actions of third parties is likely to be combined with the issue of causation to the defendant's ultimate disadvantage.²⁵⁰

There is one other circumstance, which the author hesitates to mention given the current notoriety in the popular press of the failure of government employees and contractors to disclose their actions, much less answer for them criminally,²⁵¹ that may give rise to the "justification" defense. This concept revolves around the justification for or excuse of violations of the law committed in the interest of "national security."²⁵² Considering that the issue has not yet been addressed by the courts, it is enough to note that such claims, if they are legally cognizable, may be readily asserted by many federal facilities and/or federal employees.²⁵³ However, the various statutory provisions which permit the President to exempt facilities which are of paramount importance to the United States²⁵⁴ may be interpreted to condemn as criminal acts decisions to ignore emission, discharge, and reporting standards made in the lower echelons of government.

The Defenses in Civil Actions

After such a prolonged discussion, one might readily argue that the mere existence of the concept of affirmative defenses warrants preference for civil enforcement. Such an argument overlooks the fact that for agency imposed penalties in a civil enforcement scheme, proceedings similar to a trial on the issue of guilt or innocence, including the concept of affirmative defenses, are often bound together with what is in effect a sentencing determination under the statutes.²⁵⁵

Those imposing civil penalties are required to consider:

- the seriousness of the violation(s);
- the economic benefit to the violator;
- the history of violations (if any) by the same "person";
- the good faith efforts of the violator to comply;
- the economic impact of the penalty on the violator; and,
- other matters which justice may require.²⁵⁶

It is not difficult to see that the affirmative defenses discussed above pale in comparison to the complexity of this civil scheme, particularly if a jury trial on the issue of the imposition of penalties is required.²⁵⁷ The separation of the legal concepts relevant to determination of guilt integral to criminal proceeding and perhaps to due process under United States v. Tull²⁵⁸ greatly simplifies the decision making process, but even more importantly, criminal enforcement provides the deterrent of conviction of the individual

wrongdoer, regardless of sentence, and the potential for a punishment which fits the more heinous crimes.²⁵⁷

PROCEDURAL DIFFICULTIES AND DISTINCTIONS

The conventional wisdom has long been that the criminal law provides ingenious defense attorneys with rich ground for the discovery or perhaps invention of procedural roadblocks to effective enforcement of environmental statutes.²⁴⁰ These can conceivably range from preliminary challenges to venue²⁴¹ to collateral challenges to convictions under environmental statutes.²⁴² (One might easily include evidentiary issues in this category, but they have been reserved for discussion below.) While conclusions about the complexity of criminal enforcement may seem valid on cursory inspection, the interjection of procedural issues standing alone does not necessarily denote complexity. A review of the procedural decisions associated with criminal enforcement may rebut hasty conclusions and demonstrate, with the few inevitable exceptions, the inherent logic and simplicity of criminal enforcement.

The Choice Between Criminal and Civil Enforcement

Despite numerous early challenges, it is now generally accepted that the government is not required to seek civil remedies prior to the initiation of criminal actions under environmental statutes.²⁴³ Similarly, the fact that the

Congress "created a unique situation in which a defendant is automatically liable for a civil penalty when he follows the only route available [notification] to avoid criminal prosecution."²⁴⁴ is not a bar to criminal proceeding for failing to report the release or for the criminal act itself.²⁴⁵ It is not so clear to what extent criminal and civil enforcement actions may proceed simultaneously,²⁴⁶ but the fact that the regulatory scheme is constantly being defined by both civil and criminal actions does not create ex post facto definitions of criminal acts.²⁴⁷

Concerns about the coordinated preparation of civil and criminal cases against the same defendant may be more of an evidentiary issue than procedural one²⁴⁸, but even if the government is compelled to elect an enforcement process, neither form of enforcement is necessarily preferable merely because a choice must be made. In short the presence of two enforcement systems may complicate the regulator's decision making process, but the parallel systems do not unduly complicate the criminal process.

The Grand Jury Process

A principle procedural requirement among the "heightened constitutional protection" afforded criminal defendants in environmental cases is the grand jury process,²⁴⁹ but the presentation of the case to the panel is not a roadblock to criminal enforcement; it is an integral part of the trial

preparation process in which the United States Attorney is, with the sanction of the courts, intimately involved.²⁷⁰ The failure of the grand jury to return an indictment is the exception rather than the rule.²⁷¹ Defense attorneys know this and often permit the government to proceed on an "information" by waiving the indictment,²⁷² and if the punishment for the offense can not exceed imprisonment for one year (environmental statutes in this category include Clean Air Act violations and negligent violations of the Clean Water Act)²⁷³ the government may elect this option without the defense's consent.²⁷⁴

There are of course pitfalls in the grand jury process, and sometimes these are related to parallel civil actions.²⁷⁵ Such problems are, however, more likely to delay rather than prevent criminal enforcement and may be avoided altogether under the Justice Department Guidelines discussed above.²⁷⁶ In summary, the grand jury process is a constitutionally necessary step,²⁷⁷ but as an ex parte proceeding it is likely to be more effective and less complex than extensive civil discovery.²⁷⁸

This is true because the grand jury process and subsequent trial are governed in part by the federal Speedy Trial Act.²⁷⁹ While the Speedy Trial Act is not the panacea Congress had hoped for, it does help to prevent undue delay in criminal trials,²⁸⁰ and it is safe to conclude that criminal trials generally move considerably faster than their civil counterparts.

The Post-Conviction Collateral Attack

As we have seen, historically the courts have simply rebuffed the invocation of procedural devices to thwart criminal enforcement and what might be construed as procedural burdens have in effect been assets in the enforcement process. A recent collateral attack on criminal enforcement based on procedural challenges was also unsuccessful, though the defendant corporation alleged everything from "technical incompetence" to "obstruction of justice" to support Federal Tort Claim actions based on tortious initiation of criminal prosecutions.²⁰¹ These allegations appear to be more in the nature of an affirmative defense of "selective prosecution,"²⁰² but the defendant, later the plaintiff, did not raise such a defense at the criminal trial because of a guilty plea. The government, perhaps in an effort to resolve the substantive issue, did not attempt to assert collateral estoppel, and the Court of Appeals for the First Circuit relied on the "discretionary function exception" to invoke sovereign immunity and uphold dismissal of the complaint.²⁰³

EVIDENTIARY ISSUES

Criminal enforcement actions always carry with them concerns generated by both the exclusionary rule's protection of the defendants' constitutional rights against illegal searches and self-incrimination.²⁰⁴ These concerns are magnified by the parallel enforcement actions available under the principle

environmental statutes²⁰⁵ and the fact that a great deal of the evidence in many environmental cases is collected directly from reports and documents which potential defendants are required to submit under threat of other sanctions.²⁰⁶

The Issues in Parallel Enforcement Actions

The courts have recognized the evidentiary issues created by parallel environmental enforcement and have generally held that, with the significant statutory exception of notification information required by The Comprehensive Environmental Response, Compensation, and Liability Act and the spill provisions in section 311 of the Clean Water Act,²⁰⁷ evidence gathered during normal monitoring activities or during civil proceeding may be used in criminal enforcement efforts.²⁰⁸ Unfortunately for civil enforcement, the reverse is not necessarily true. While there is no evidentiary bar to the use of "information obtained in civil or administrative discovery" in criminal enforcement "provided there was a good faith civil basis for conducting the discovery",²⁰⁹ the Federal Rules of Criminal Procedure deny attorneys involved in civil enforcement access to records or accounts of grand jury proceedings, unless the court is willing, in the interest of furthering a related judicial proceeding, to order the matters released.²¹⁰ This generally requires at least one in camera review by a federal district judge.²¹¹

The virtually unbridled use of statements and other

evidence obtained in civil proceeding for criminal enforcement purposes is particularly noteworthy because guidelines within the Justice Department do not require that those involved in Civil enforcement give "Miranda Warnings" to suspected offenders,²⁹² and the prerequisites necessary to obtain warrants pursuant to a pervasive regulatory statute are not constitutionally based and are principally determined by the governmental agency concerned.²⁹³ In addition to these sources of evidence, Dow Chemical Co. v. United States, decided by the Supreme Court in 1986, upheld the warrantless overflight of Dow's well-guarded manufacturing facility and sharply demonstrated the inspection power of the Environmental Protection Agency under the Clean Air Act.²⁹⁴ When evidence can be collected in this manner criminal prosecution of offenses committed within "pervasively regulated industries" is greatly simplified.²⁹⁵

The Distinction of Substantive Concerns

No comment on evidentiary issues in environmental enforcement would be complete without a mention of the Ringelmann Number, a method of judging pollution by the opacity of smoke. Upheld by the Supreme Court as a valid basis for the implementation of civil sanctions by the State of Colorado,²⁹⁶ it has long been decried by experts in the field as little better than sniffing the air.²⁹⁷ The point for our purposes is not the scientific validity of the test in terms of what is

measured, that is an issue for the law makers.

The Ringelmann chart was and still is used in a manner which is, in practical effect, no different than determining the amount of a pollutant or hazardous substance we will permit to be discharged measured in parts per quadrillion.²⁷⁰ No doubt tomorrow's technology will make today's technical wizardry look equally archaic. Or perhaps we are controlling, as is likely to be the case with the Ringelmann Charts, the wrong thing altogether.²⁷¹ Regardless, an enforcement scheme should focus only on the statutory objective. Criminal enforcement, with its historic separation from value judgments, is often best suited to that task, and in certain instances criminal enforcement is the only viable sanction.

THREE EXAMPLES

Having established a framework for analysis of certain factual situations, we return to three specific categories of polluters which present serious challenges to enforcement efforts and provide the best examples of the value of criminal enforcement to achieve statutory objectives.

The Midnight Dumper²⁷²

From a historical perspective it appears that during the early days of environmental enforcement most industrial concerns, including some of America's largest corporations, were midnight dumpers in the sense that they ignored the few

existing restrictions and seldom considered the environmental impact of their actions.³⁰¹ Of course, the term midnight dumper would have to be used in an allegorical sense, because no one paid any attention to the time of day. Prosecutions under an emerging system of environmental regulation changed this approach of reckless abandon and haphazard prosecution and the first real success stories of felony criminal prosecution under environmental statutes involved the prosecution of those, who with more ingenuity than regard for others,³⁰² simply ignored the requirements of the law.³⁰³ Those of an optimistic bent might assume that as the scheme of regulation of disposal of substances, particularly hazardous ones, becomes more and more pervasive,³⁰⁴ potential wrong-doers would become more sensitized to the criminality and environmental impact of their acts and that arguably draconian measures like criminal prosecution would no longer be necessary, but in fact the opposite may be true.³⁰⁵

Only one thing can truly be said about all waste which the body politic elects to regulate -- eventually something has to be done with it. Even the decision to just let it sit (remain, lie, or puddle) may now constitute a criminal act,³⁰⁶ and with every update of the statutory scheme, more and more individuals are added to the list of potential defendants. It is simply an observation of human nature to conclude that as legal disposal of waste becomes more and more expensive and difficult, some will attempt to avoid the law altogether.³⁰⁷ These crimes,

despite the ingenious methods by which they may be committed or concealed, are not legally complex. The perpetrators are not interested in understanding, complying with, or even challenging a complex administrative scheme; they simply seek, illegally of course, to avoid it altogether. For such simple offenses with so obvious a criminal intent,³⁰⁰ the simple sanction of the swift imposition of criminal penalties is the best approach.

The Unrepentant Polluter

The genesis of this brand of criminal enforcement was the recognition by those responsible for environmental protection, that toleration of deliberate actions by persons conducting regulated activities to mislead or even deliberately deceive the Environmental Protection Agency would quickly undermine all enforcement efforts.³⁰⁰ Some of the activities prosecuted constituted deliberate frauds on the government and the brashness of the criminals is now nearly legendary,³¹⁰ but the submission of misleading or false reports is not the only manner in which this situation can arise.

Some activities file correct reports hoping that only "jawboning"³¹¹ or at worst, because of the wrong-doer's obvious cooperation, only minimal civil sanctions will be invoked.³¹² Why would a polluter clearly but illogically assume that illegal acts will be ignored simply because they are religiously confessed? Often the unrepentant polluter relies on

the practical inability or political reluctance of the Environmental Protection Agency to apply the civil equivalent of the death penalty, i.e. a comprehensive injunction or economic penalties so great that the polluting concern can no longer operate or is no longer competitive in the market place.³¹³ It is truly a shame that the polluter is often correct.

While modern proponents of criminal enforcement do not have the death penalty at their disposal,³¹⁴ enforcement efforts to evoke the substantial criminal penalties available may be the only practical method of meeting, head on, the problems of ensuring compliance with the ever expanding regulatory system. For example, the "Loss of Interim Status" (LOIS) program, designed to implement the Resource Conservation and Recovery Act, will undoubtedly produce numerous enforcement actions as operators of designated sites promise that which they cannot deliver.³¹⁵ As these sites close or are closed, the "owners and operators" will no doubt attempt to convince civil enforcement authorities that there is simply nothing to do with the waste.³¹⁶ Criminal statutes do not, for better or worse, consider such practical or economic issues, and if we are to place the burden of solving these problems, where it arguably belongs, on the public and their legislative representatives, then we must deter what has legislatively been determined to be unacceptable conduct by use of the retributive scheme of criminal enforcement.

The Federal Facilities

The States, often in the van of criminal enforcement, have long used their "police powers" for environmental regulation,³¹⁷ but in the last two decades, Congress under considerable political pressure and concerned by what it considered to be "inadequate state enforcement of environmental standards" began to enact federal statutes to improve the environment.³¹⁸ For several years after the initial federal laws, the states generally accepted their subordinate role of supplying the "police power" to create or enforce regulations implementing these "commerce clause" statutes in exchange for federal monies.³¹⁹ This system utilized under all the major environmental statutes seemed to work well until the choices "began to bind"³²⁰ and the margin cost for compliance became greater and greater. As the demands of the various federal programs increased, the states became more aggressive in their criminal enforcement efforts.³²¹ It was then that the states and the media began to notice that despite lip service by the Executive Branch directing compliance with all state and federal environmental laws,³²² the federal government might be "the biggest violator".³²³

It is significant to note that at least in California, which has a strong tradition of criminal enforcement,³²⁴ attention turned to criminal actions against an agency of the United States and the federal employee responsible for the

actions of the agency.³²⁵ In California v. Walters the municipal attorney for the City of Los Angeles attempted to prosecute the Veterans Administration and Dr. Walters, the administrator of the local medical center, in municipal court, for violations of the state statutes implementing the Resource Conservation and Recovery Act by making the improper disposal of hazardous medical wastes a criminal act.³²⁶ The complaint relied on the waiver of sovereign immunity contained in the Resource Conservation and Recovery Act.³²⁷ :

The municipal court action did not last long, the case was immediately removed to federal court by the defendants, not under federal question jurisdiction,³²⁸ but under provisions of the United States Code which permit Federal Officers sued or prosecuted for actions "under color of ... office or on account of any right, title or authority claimed under any act of Congress" to remove the prosecution to federal district court.³²⁹ Applying the Federal Rules of Criminal Procedure,³³⁰ the District Court dismissed the complaint on the grounds of "sovereign immunity" without opinion.³³¹ The Court of Appeals for the Ninth Circuit rejected California's assertions that provisions of the act were drafted in light of the strict construction of statutory waivers espoused by the Supreme Court in Hancock v. Train,³³² and in a brief per curiam opinion found no "clear intent [by Congress] to waive immunity from criminal sanctions".³³³

Because district courts have generally followed the

California v. Walters requirement for a clear and unambiguous waiver of immunity and refused to find such a waiver even for civil penalties or fines,³³⁴ environmental enforcement by the states has been effectively limited to the injunctive relief permitted by dicta in California v. Walters,³³⁵ and as we have seen, injunctive relief is often politically and practically unavailable. This is particularly true when concerns of Federalism are involved.³³⁶

To date administrative efforts by the Environmental Protection Agency to regulate federal facilities have not fared much better than state criminal and civil efforts,³³⁷ and though a new compliance strategy has just been issued,³³⁸ administrative enforcement without at least the reasonable availability of sanctions is not likely to be effective.³³⁹ This observation is particularly important for our purposes as civil enforcement is presently not available from the federal courts either. The Justice Department has refused time and again to bring civil actions under the principle environmental protection statutes against federal agencies and facilities, citing the "unitary theory of the executive branch,"³⁴⁰ which asserts that such cases are actually a suit by the government against itself which does not produce a "case in controversy" required by the constitution to impart jurisdiction.³⁴¹ Similarly, the courts have rejected "citizen suits" by the states as beyond the scope of the enforcement scheme contemplated by Congress.³⁴² Is there then no manner by which

the law may be enforced?

Apparently Congress or at least the House Committee on Energy and Commerce is convinced that there is not. Obviously sincere in their adherence to the adage "that the whole Constitution has been erected upon the assumption that the King not only is capable of wrong, but is more likely to do wrong than other men if he is given a chance,"³⁴³ members of the committee have introduced³⁴⁴ and the committee has favorably reported legislation to create a "Special Environmental Counsel" empowered to bring enforcement actions against federal facilities.³⁴⁵ Unfortunately, for environmental enforcement there is no indication that such civil enforcement actions would be any more effective or expeditious than their counterparts directed against large private corporations. Financial penalties directed at the facility are not likely to strike fear in the hearts of irresponsible employees and injunctive relief is also impractical. It appears that, for the moment at least, the only way compliance by federal facilities may be encouraged by federal court action is the direct criminal prosecution of federal facility employees and federal contractors and their employees.³⁴⁶ Such prosecutions are already underway.³⁴⁷

It would very much appear that as a society we should want it the other way around. We desire that our government employees, deterred from criminal conduct by retributive sanctions, report the potential for violations of the

environmental laws to superiors sensitive to correcting the problem. Some argue that more extensive job protection for "whistle-blowers" will resolve this dilemma,²⁴² but the principle environmental statutes already contain pervasive employee protection provisions.²⁴³ Perhaps a diligent criminal enforcement effort is the only viable method of producing the desired result.

CONCLUSION

By now it is obvious to the reader that the three examples of enforcement problems are merely representative. In fact the three categories are not even mutually exclusive. For the present federal facilities and/or their employees may enjoy at least partial immunity from sanctions which might be imposed on other midnight dumpers or unrepentant permit holder, and the permit holder who is unwilling to comply with the terms of the legal license may turn to deliberate unlawful disposal. Nearly all categorizations within extensive schemes of federal regulation may be subjected to such criticisms,²⁵⁰ but discrete categorization of wrongdoers, while helpful in understanding the desirability of a certain enforcement approach, is not essential to effective implementation of that approach.

General characterizations are, however, valuable if they persuade us by a demonstration of otherwise unregulated activities to the logic of and need for a comprehensive scheme of criminal enforcement of environmental laws regardless

of the station of the wrongdoer. Such a comprehensive scheme is available under existing laws. Congress has determined that the existing environmental crimes are serious offenses²⁵¹ and appears ready to add other crimes to the felony category.²⁵² But additional statutes and greater potential punishments are not necessarily effective merely because they exist. If we do not unduly burden ourselves with philosophical baggage and if we avoid knee-jerk rejections of retributive enforcement just because it is more difficult to quantify its value as a deterrent,²⁵³ we can as a society effectively implement the laws we already have to protect from the few that which belongs to all.²⁵⁴

ENDNOTES

1. Quoted at 1 A. Reitze, Environmental Law four-126 (2d ed. 1972) (contrasting enforcement under the Refuse Act, see infra text accompanying note 24 and the 1970 version of the Federal Water Pollution Control Act).
2. National Environmental Policy Act of 1969, § 101, 42 U.S.C. § 4321 (1986).
3. Rockefeller, Introduction to the Environmental Protection Symposium, 35 Alb. L. Rev. 23 (1970) (combining "Earth Day emotionalism with a call for practical action to protect the environment). For those, like the author, whose classical education is limited to divining quotations in law review articles, this particular one recalls The Temple-garden scene of I Henry VI Act II: SC iv, in which the Earl of Warwick proudly admits his ignorance of the subtle distinctions of the law. Shakespeare's authorship of this scene, though certainly not of the entire play, is generally conceded. The Complete Works of Shakespeare 207-208 (H. Craig ed. 1961)
4. Ruckelshaus, Environmental Protection: A Brief History of the Environmental Movement In America and the Implications Abroad, 15 Env'tl. L. 455, 457 (1985).
5. See Manley, Federalism and Management of the Environment, 19 Urb. Law. 661 (1987).
6. Donnelly and Van Ness, The Warrior and the Druid-The DOD and Environmental Law, 33 Fed. Bar and News J. 37-38 (1986).
7. For an early description of the supposed limits on criminal enforcement see Kovel, A Case for Civil Penalties: Air Pollution Control, 46 J. Urban L. 153 (1969).
8. For an early description of the "cumbersome" aspects of criminal enforcement see Laughran, The Law and the Corporate Polluter: Flexibility and Adaptation in the Developing Law of the Environment, 23 Mercer L. Rev. 571, 585 (1972).
9. See Riesel, Criminal Prosecution and Defense of Environmental Wrongs, 15 Env'tl L. Rep. (Env'tl. L. Inst.) 10065 (1985).
10. Department of Justice, Land and Natural Resources Division Directive no. 5-87, Oct. 13, 1987, cited in, Marzulla, Lands Division Confronts the Need for Civil and Criminal Environmental Enforcement, 3 Nat'l. Env'tl. Enforcement J. 3 (Jan. 1988).

11. Habicht, The Federal Perspective on Environmental Criminal Enforcement: How to Remain on the Civil Side 17 *Envtl. L. Rep. (Envtl. L. Inst.)* 10478, 10481 & n.24.(1987) citing a conversation with Judson Starr, Chief of the Environmental Crimes Section, Land and Natural Resources Division, Department of Justice, see Starr, Countering Environmental Crime, 13 *B. C. Env'tl. Aff. L. Rev.* 379 (1986).
12. Adams and Braem, EPA's Enforcement Priorities for Fiscal Year 1988 2 *Nat'l. Env'tl. Enforcement J.* 3, 10.
13. Habicht, supra note 11, at 10478 and McMurry and Ramsey, Environmental Crime: The Use of Criminal Sanctions In Enforcing Environmental Laws, 19 *Loy. L. A. L. Rev.* 1133 (1986). Citations to unpublished internal statistics of the Department of Justice have come into vogue as a method of establishing this trend. The author has relied on secondary sources which were prepared by those with more ready access to these numbers.
14. McMurry and Ramsey, supra note 13, at 1138.
15. See Riesel, supra note 9, at 10072, commenting on the views expressed in Olds, Unkovic, and Levin, Thoughts on the Role of Penalties In the Enforcement of The Clean Air Act and Water Acts, 7 *Duq. L. Rev.* 1 (1978-79). The understanding by prosecutors of the importance of indicting people who can go to jail is demonstrated by the guidance provided in handling such cases. See 4 Department of Justice Manual § 5-3.731 (P-H)(1987, Supp. 1988).
16. N. Frank, From Criminal Law to Regulation * A Historical Analysis of Health and Safety Law 1 (1986).
17. Habicht, supra note 11, at 10481.
18. Starr, supra note 11, at 382.
19. See Note, How Well Can States Enforce Their Environmental Laws When the Polluter is the United States Government?, 18 *Rutgers L.J.* 123 (1986)(authored by Nancy E. Milsten).
20. Hart, Positivism and the Separation of Law and Morals, 71 *Harv. L. Rev.* 593 (1958).
21. Mix, The Misdemeanor Approach to Pollution Control 10 *Ariz. L. Rev.* 91 (1968).
22. Laughran, supra note 8, at 585 and Kovel, supra note 7, at 153.

23. See Tundermann, Constitutional Aspects of Economic Law Enforcement, 4 Harv. Envtl. L. Rev. 41, 43 (1980).
24. Tripp and Hall, Federal Enforcement Under the Refuse Act of 1899 35 Alb. L. Rev. 60 (1970) and Glenn, The Crime of Pollution: The Role of Federal Water Pollution Criminal Sanction 11 Am. Crim. L. Rev. 835 (1973).
25. Riesel, supra note 9, at 10066, note 16.
26. The Scow No. 36, New England Dredging Co. v. United States, 144 F.932 (1st Cir. 1906) and The Scow No. 9, The Minot L. Wilcox, 152 F. 548 (D.C. Mass, 1907) The Act is still occasionally used for that purpose The University of Texas Medical Branch at Galveston v. United States, 557 F.2d 438 (5th Cir. 1977), cert. denied, 439 U.S. 820 (1978). For a detailed history of the Refuse Act Provisions, see, Morris, Environmental Problems and the Use of Criminal Sanctions, 7 Land and Water L. Rev. 421 (1972).
27. 33 U.S.C. § 411 (1982).
28. § 16 Rivers and Harbors Act, 33 U.S.C. 411 (1982) (qui tam provisions). In the heyday of the acts modern revival a congressman recovered under the act, see, United States v. St. Regis Paper Co., 328 F. Supp. 660 (W.D. Wis. 1971). Some modern statutes contain as yet little used reward provisions. See, § 2002 Prevention of Pollution from Ships Act, 33 U.S.C.A. § 1908 (Supp. 1988), § 103 Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C.A. § 9609 (Supp. 1988), Marine Mammal Protection Act, 31 U.S.C. § 1376 (1982), and the Forest Service's organic act, 16 U.S.C. § 559(a) (1982).
29. See United States v. Standard Oil Co., 384 U.S. 224 (1966). The Refuse Act would never have solved all our water pollution problems. It specifically excludes refuse "flowing from streets and sewers and passing therefrom in a liquid state," 33 U.S.C. § 407 (1982). Of course such discharges are a major focus of the Clean Water Act, see United States v. Little Rock Sewer Comm., 460 F. Supp. 6 (E.D. Ark. 1978) (conviction of municipal sewer committee for violations of Clean Water Act, 33 U.S.C. § 1319(c)(2)).
30. United States v. United States Steel Corp., 482 F.2d 439 (7th Cir. 1973), cert. denied 94 S.Ct. 229 (1973), and United States v. American Cyanamid Co., 480 F.2d 1132 (2nd Cir. 1973). The courts legally elastic definition of "refuse" was proved out factually by events like the Cuyahoga River fire in Cleveland, Ohio. See, Ruckelshaus, supra note 4.

31. Tripp and Hall, supra note 24, at 75 and Glenn, supra note 24, at 871.
32. Morris, supra note 26, and Laughran, supra note 8.
33. Comment, The Criminal Responsibility of Corporate Officials for Pollution of the Environment, 37 Alb. L. Rev. 61, 77 (1972) (authored by Robert H. Iseman) citing T. Atkeson, Speech to ALI-ABA Seminar on Environmental Law., Hearings on Refuse Act Permit Program before the Senate Subcomm. on the Environment of the Senate Comm. on Commerce, 92nd Cong., 1st Sess. 153 (1971).
34. Morris, supra note 26, at 424. The Refuse Act still has limited usefulness for non-point source discharges into navigable waters. See, United States v. Wisconsin Barge Lines and Reldy Terminal, Inc., (E.D. Mo. 1987) (guilty plea to violation for unpermitted discharges from barges), abstracted in 2 Nat'l Env'tl. Enforcement J. 20 (Sept. 1987).
35. Ball and Friedman, The Use of Criminal Sanctions in the Enforcement of Economic Legislation, 17 Stan. L. Rev. 197 (1965) For more modern applications to environmental law, see, Drayton, Economic Law Enforcement, 4 Harv. Env'tl. L. Rev. 1 (1980).
36. N. Frank, supra note 16, at 168-177.
37. Compare the theoretical concepts in Drayton, supra note 35 with those contained in Hawkins, Environment and Enforcement: Regulation and the Social Definition of Pollution (1984) (derived under the British system of environmental enforcement).
38. See N. Frank, supra note 16, at 176-177. For a detailed discussion of the jurisprudential aspects of environmental enforcement, see, Sagoff, Can Environmentalists be Liberals? Jurisprudential Foundations of Environmentalism 16 Env'tl. L. 775 (1986).
39. Ruckelshaus, supra note 4, at 461.
40. See Habicht, supra note 11, at 10479 and McMurray and Ramsey, supra note 13, at 1138.
41. The Toxic Substances Control Act was designed to fill regulatory gaps, but is now used principally to monitor the manufacture, use and distribution of chemical substances, compare, S. Rep. No. 698, 94th Cong., 2d Sess. (1976), reprinted in, 1976 U.S. Code Cong. & Admin. News 4491 (Toxic Substances Control Act Conference Report), with, H.R. Rep. No. 519, 99th

Cong., 2d Sess. (1986), reprinted in, 1986 U.S. Code Cong. & Admin. News 5004 (Asbestos Hazard Emergency Response Act of 1986, amending The Toxic Substances Control Act).

42. Ruckelshaus, supra note 4, at 457. The gradual foreclosure of land and water disposal of toxic sewer sludge is a prime example of interlocking the statutes. See, 33 U.S.C. § 1412a (1982), Ocean Dumping Act sewage sludge provision, 42 U.S.C.A. § 6939 (Supp. 1988), Resource Conservation and Recovery Act domestic sewage provisions, and 33 U.S.C.A. § 1345 (Supp. 1988), Clean Water Act sewage sludge provisions. The recent extension of the "Jones Act," 46 App. U.S.C. 883 (1982), amended by Pub. L. No. 100-329, 102 Stat. 588 (1988) to sewage sludge and other valueless materials transported for disposal within the economic zone is another indication of efforts by Congress to control disposal.

43. Adamo Wrecking Co., v. United States, 434 U.S. 273 (1978).

44. Note, Adamo Wrecking Co., v. United States: Supreme Court Limits Scope of Clean Air Act Emission Standards, 8 *Envtl. L. Rev.* 895 (1978).

45. Clean Air Act § 112(e)(5), Pub. L. 95-623, § 13(b), 92 Stat. 3458 (1978) codified at 42 U.S.C. § 7412(e)(5) (1982).

46. For a compelling discussion of this concept of "realistic" jurisprudence, see, G. Gilmore, The Ages of American Law 78-80 (1977).

47. See Ottinger, Strengthening of the Resource Conservation and Recovery Act in 1984: The Original Loopholes, the Amendments, and the Political Factors Behind Their Passage, 3 *Pace Env'tl. L. Rev.* 1 (1985).

48. See infra text accompanying notes 55-59 (Clean Water Act Amendments).

49. The general trend is away from misdemeanors and toward felony punishments generally ranging from 2 to 5 years. Financial punishments have generally been increased accordingly, but the Clean Water Act retains its unique \$2500 minimum fine for negligent violations and adds a \$5000 minimum fine for knowing violations, 33 U.S.C.A. Ss 1319 (Supp. 1988). As to the earlier amendments see, McMurray and Ramsey, supra note 13. The states are generally following this same trend. See, Allan, Criminal Sanctions Under Federal and State Environmental Statutes, 14 *Ecology L. Q.* 117 (1987) and McElfish, State Hazardous Waste Crimes, 17 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10465 (1987).

50. Originally the Resource Conservation and Recovery Act of 1976, P.L. NO. 94-580, 90 Stat. 2795, was an amendment to the Solid Waste Disposal Act of 1965, but gradually the former has been adopted as the common name for the entire hazardous waste regulatory scheme, H.R. Rep. No. 198, 98th Cong., 2d Sess. 18, reprinted in, 1984 U.S. Code Cong. & Admin. News 5576.

51. Resource Conservation and Recovery Act § 3008, 42 U.S.C.A. § 6928(d) (Supp. 1988).

52. Superfund Amendment and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613 (Codified in scattered sections of 42 U.S.C.).

53. Asbestos Hazard Emergency Response Act of 1986, Pub. L. No. 99-519, 100 Stat. 2970 (codified in various sections of 15 U.S.C.).

54. H.R. Rep. NO. 763, 99th Cong., 2d Sess. 14, reprinted in 1986 U.S. Code Cong. & Admin. News 5004, 5005.

55. Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7 (codified in various sections of 33 U.S.C.). Apparently the Environmental Protection Agency also thinks highly of the amendments, the agency has proposed to continue the "domestic sewage exclusion" under the Resource Conservation and Recovery Act and rely on the revitalized Clean Water Act to control the generally recognized threat of hazardous waste discharges to publicly-owned treatment works. See 53 Fed. Reg. 47,632 (1988).

56. Water Quality Act of 1987 § 312(c)(1)(A) and (c)(2)(A), 33 U.S.C.A. § 1319(c)(1)(A) and (c)(2)(A) (Supp. 1988).

57. Water Quality Act of 1987 § 312(c)(1) and (c)(2), 33 U.S.C.A. § 1319(c)(1) and (c)(2) (Supp. 1988).

58. Water Quality Act of 1987 § 312(c)(3), 33 U.S.C.A. § 1319 (c)(3) (Supp. 1988).

59. Water Quality Act of 1987 § 312(c)(1)(B) (negligent introduction) and (c)(2)(B) (knowing introduction), 33 U.S.C.A. § 1319(c)(1)(B) and (c)(2)(B) (Supp. 1988). These criminal provisions are clearly designed to enforce the toxic and pretreatment effluent standards contained in 33 U.S.C. § 1317 by punishing unpermitted introduction.

60. Of course some cases may be less difficult than others, See e.g. United States v. Ralston Purina Co., No. Cr. 81-00126-01-L (W.D. Ky. Jan. 4, 1982) (Pre-amendment criminal action for release of explosive gases to city sewer under The Refuse Act and The Resource Conservation and Recovery Act as well as the Clean Water Act).

61. United States v. Ocean Spray Cranberries, (D. Mass. 1988), abstracted in 3 Nat'l Env'tl. Enforcement J. 23 (April 1988) (seventy-six count indictment including sixty-five counts of violations of pretreatment standard involving acidic waste).
62. 42 U.S.C. § 6979b (Supp. 1986).
63. Wills, EPA's National Enforcement Investigations Center, 2 Nat'l. Env'tl. Enforcement J. 3,4 (Sep. 1987).
64. Id. at 6 (concerning Federal Bureau Investigation efforts), United States v. Wisconsin Barge Lines and Reidy Terminal, Inc., (E.D. Mo. 1987), abstracted in 2 Nat'l Env'tl. Enforcement J. 20,21 (1987) (investigation assistance provided by the United States Coast Guard Marine Safety Office). See also Starr, supra note 11, at 381 and note 4 (concerning environmental enforcement activities of other agencies).
65. 2 Nat'l Env'tl. Enforcement J. 25 (July 1987).
66. See Gray, The Nature and Sources of Law, 112-114 (1921).
67. See United States v. Ashland Oil and Transportation Co., 504 F.2d 1317 (6th Cir. 1974), United States v. Phelps Dodge Corp., 391 F. Supp. 1181 (D. Ariz. 1975), United States v. Hudson Farms, Inc., 12 Env't Rep. Cas. (BNA) 1444 (E.D. Penn. 1978), United States v. Frezzo Brothers Inc., 602 F.2d 1123 (3rd Cir. 1979), United States v. Oxford Royal Mushroom Products Inc., 487 F. Supp. 852 (E.D. Penn. 1980), and United States v. Distler, 671 F.2d 954 (6th Cir.), cert. denied, 454 U.S. 822 (1981), but cf United States v. Messer Oil Corp., 391 F. Supp. 557 (W.D. Penn. 1975) (faulty regulation resulted in dismissal of information).
68. Comment, Putting polluters in Jail: The Imposition of Criminal Sanctions on Corporate Defendants Under Environmental Statutes, 20 Land & Water L. Rev. 93, 106 (1985) (authored by Michele Kuruc).
69. See infra text accompanying notes 97-101 (principle federal environmental statutes).
70. Scalia, Responsibilities of Regulatory Agencies Under Environmental Law, 24 Hous. L. Rev. 97, 105 (1987), citing, Heckler v. Chaney, 105 S.Ct. 1649, 1656 (1985).
71. Comment, Criminal Enforcement of Federal Water Pollution Laws in an Era of Deregulation, 73 J. Crim. L. & Criminology 642 (1982) (authored by Mark W. Schneider).
72. See Summa Theologica, The Basic Writings of Saint Thomas Aquinas, Random House Edition (1945).

73. See Sagoff, supra note 38.
74. Habicht, supra note 11, at 10479.
75. Compare the theories of Kovel, supra note 7 and Drayton, supra note 35 with the practical realities created by Tull v. United States., 481 U.S. 412 (1987).
76. See Starr, supra note 11, at 389, but see Flannery and Lannan, Hazardous Waste--The Oil and Gas Exception, 89 W. Va. L. Rev. 1089 (1987) and Wash. Post, Nov. 17, 1988, at A1 and A4 ("Oil's Superfund Loophole" reports dissatisfaction with the regulatory scheme). Perhaps we will never get it right because we simply do not know what to regulate or to what extent it should be regulated. See, Ruckelshaus, supra note 4, at 459.
77. For the problems associated with developing a regulatory scheme of any kind, See, Hill, The Third House of Congress versus the Fourth Branch of Government: The Impact of Congressional Committee Staff on Agency Regulatory Decision-Making, 19 John Marshall L. Rev. 247 (1986). This requirement is worthy of a tome all its own. For our purposes it is enough to note the massive litigation resulting from attempts to regulate certain substances and certain industry groups.
78. See Habicht, Responses to Justice Antonin Scalia. Responsibilities of Regulatory Agencies Under Environmental Law, 24 Hous. L. Rev. 111 (1987).
79. It has been argued that when the government does not bear its burden well the civil enforcement scheme can actually contribute to improper disposal. Szasz, Corporations, Organized Crime, and the Disposal of Hazardous Waste: An Examination of the Making of a Criminogenic Regulatory Structure, 24 Criminology 1 (1986). As to who or what may be a "person" under the various statutes, see infra text accompanying notes 154-155.
80. See United States v. Johnson Towers Inc., 741 F.2d 662 (3rd Cir. 1984) (citing United States v. International Minerals & Chemical Corp., 402 U.S. 558 (1971)), cert. denied sub nom. Angel v. United States, 469 U.S. 1208 (1985).
81. See United States v. City of Rancho Palos Verdes, 841 F.2d 329 (9th Cir. 1988).
82. 33 U.S.C.A. § 1319(d) (Supp. 1988), Clean Water Act; 42 U.S.C. § 7413(c) (1982), Clean Air Act; and, 42 U.S.C. § 6928(g) (Supp. IV 1986), Resource Conservation and Recovery Act.

83. See Drayton, supra note 35.

84. F. Grad, Treatise on Environmental Law, 2-555 (1983). Unfortunately for our thesis similar criticisms may be applied to criminal fines, see Comment, Putting Polluters in Jail: The Imposition of Criminal Sanctions on Corporate Defendants Under Environmental Statutes, 20 Land & Water L. Rev. 93 (1985) (A strident call for "stiff" financial penalties which misses the point that society still pays twice unless the fines imposed put the polluter out of business.) A recent bankruptcy case emphasizes this point. See Wisconsin Barge Lines Inc., v. United States, 91 Bankr. 65 (Bankr. E.D. Mo. 1988) (general exception to discharge applicable to fines does not apply to corporate debtors).

85. Costle, Environmental Regulation and Regulatory Reform, 57 Wash. L. Rev. 409, 431 (1982).

86. Stewart, The Discontents of Legalism: Interest Group Relations in Administrative Regulation, 1985 Wis. L. Rev. 655.

87. Compare Latin, Ideal Versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine-Tuning Regulatory Reforms, 37 Stan. L. Rev. 1267 (1985) with Ackerman and Stewart, Comment: Reforming Environmental Laws, 37 Stan. L. Rev. 1333 (1985).

88. A. Reitze, supra note 1, at introduction-58.

89. See Latin, supra note 87, at 1270.

90. 42 U.S.C. §§ 7413 and 7603 (emergency powers) (1982), Clean Air Act compliance orders and injunctive relief, 33 U.S.C. §§ 1319 and 1364 (emergency powers) (1982), Clean Water Act compliance orders and injunctive relief, and 42 U.S.C. §§ 6928 and 6973 (imminent hazard provision) (Supp. IV 1986), Resource Conservation and Recovery Act compliance orders and injunctive relief. Citations to injunctive relief under the air and water acts are legion, but civil enforcement against hazardous waste facilities is only beginning. See, United States v. Vineland Chemical Co., Inc., 692 F. Supp. 415 (D.N.J. 1988).

91. See infra notes 312-313 and accompanying text (concerning the practical and legal limitations on injunctive relief).

92. See General Motors v. Ruckelshaus, 724 F.2d 979, 997 (D.C. Cir. 1983), judgement and opinion vacated on reh'g en banc., General Motors b. Ruckelshaus, 742 F.2d 1561 (D.C. Cir. 1984). cert. denied, 471 U.S. 1074 (1985) In this opinion Senior Judge Bazelon, in a Clean Air Act case, condemns as "uninventive" any lawyer unable to obtain a delay of "at least several years". Because the outcome was also vacated on rehearing, it

cannot be unquestionably established that Senior Judge Bazelon was censored only for his frankness.

93. See Kovel, supra note 7 and Drayton, supra note 35.

94. Tundermann, supra note 23. See also Costle, supra note 85, at 432 and Ackerman and Stewart, supra note 87, at 1365.

95. P. Dickson, The Official Rules 122-123 (1978) (This handy little storehouse of maxims for every occasion has found its way onto the reference shelves of a number of libraries). For a more intellectual approach, see, N. Frank, supra note 16.

96. See Tull v. United States, 481 U.S. 412 (1987). Seventh Amendment, U.S. Const. amend. VII, guarantees jury trial to determine liability for civil penalties under the Clean Water Act, 33 U.S.C.A. § 1319 (Supp. 1988). For a detailed exposition of the facts in Mr. Tull's case, including the revelation that two previous enforcement actions had been filed against him, see Note, United States v. Tull: The Right to Jury Trial Under the Clean Water Act - Jury is Still Out, 41 U. Miami L. Rev. 665 (1987) (authored by Erica B. Clements) This article published while Tull was under consideration by the Supreme Court calls quite emotionally, and ultimately correctly it would appear, for the subsequent reversal of the Court of Appeals decision denying the jury trial. Without slipping totally into tangential criticism, the author wishes to express regret that the unwise decision in United States v. Tull adds substantial practical weight to his thesis.

97. See Kovel, supra note 7, at 154.

98. United States v. Tull, 481 U.S. 412, 420 (1987) (Scalia, J., concurring in part and dissenting in part).

99. 42 U.S.C. § 6928(e) (1982), knowing endangerment provision Resource Conservation and Recovery Act, and 33 U.S.C.A. § 1319(c)(3) (Supp. 1988), knowing endangerment provision Clean Water Act.

100. H.R. Rep. No. 1146, 91st Cong., 2d Sess., reprinted in, 1970 U.S. Code Cong. & Admin. News 5356. For examples of the complexity of this enforcement technique, see, Cincinnati Gas & Electric Co., v. Environmental Protection Agency, 578 F.2d 660 (6th Cir. 1978), cert. denied, 439 U.S. 114 (1979) and Ohio v. Environmental Protection Agency, 784 F.2d 880 (6th Cir. 1986).

101. S. 1894, 100th Cong., 2d Sess. (1988). The addition of a knowing endangerment provision to the Clean Air Act and other environmental statutes has been predicted, see, Wills, supra note 63, at 6. Congress does seem to leap-frog the environmental statutes by grafting provisions of a newer

statute into an older one as the more senior statute is amended, compare, 42 U.S.C. § 6928(e) (1982) (knowing endangerment provision added to the Resource Conservation and Recovery Act by the 1980 amendment, S. Rep. No. 172, 96th Cong., 2d Sess., 37, reprinted in, 1980 U.S. Code Cong. & Admin. News 5019, 5036-37, with, Water Quality Act of 1987 § 312, 33 U.S.C.A. § 1319(c)(3) (Supp. 1988) (knowing endangerment provision added to the Clean Water Act).

102. 33 U.S.C.A. §§ 1251 - 1387 (Supp. 1988).

103. 42 U.S.C. §§ 7401-7642 (1982).

104. We will use this "unpopular name" for the Marine Protection, Research and Sanctuaries Act of 1972, 33 U.S.C. §§ 1401-1445 (1982).

105. 42 U.S.C. 6901-6991 (Supp. IV 1986).

106. 33 U.S.C.A. § 1319(c)(2)(A) (Supp. 1988), Clean Water Act; 42 U.S.C. § 7413(c) (1982), Clean Air Act; 33 U.S.C. § 1415(b), Ocean Dumping Act 1982; 42 U.S.C. 6928(d)(1) (Supp. IV 1986), Resource Conservation and Recovery Act. The Noise Control Act, 42 U.S.C. §§ 4901-4918 (1982) contains a similar provision, but implementing regulations have not been effected, 42 U.S.C. § 4910 (1982).

107. Compare 33 U.S.C.A. § 1319(c)(1) (Supp. 1988) and 33 U.S.C. §§ 407 and 411 (1982).

108. 16 U.S.C. §§ 1531-1543 (1982).

109. 16 U.S.C. §§ 1538(a)(1)(B), 1538(g), and 1540(b)(1) (1982).

110. 33 U.S.C.A. § 1908 (Supp. 1988). The enforcement of such statutes, which are likely to increase as a function of concern for the global environment, presents interesting jurisdictional questions. See, Blakesley, United States Jurisdiction Over Extraterritorial Crime, 73 J. Crim. L. & Criminology 1109 (1982).

111. The Marpol Protocol done at London on February 17, 1978 incorporates the 1973 International Convention for the Prevention of Pollution from Ships, 33 U.S.C.A. § 1901 (Supp. 1988). See, Hearings before the National Ocean Policy Study of the Committee on Commerce, Science, and Transportation, 100th Cong. 1st Sess. 130, (1987).

112. 42 U.S.C.A. §§ 300f-300j (Supp. 1988).

113. Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1330-1356

(1982), Historic Sites, Buildings and Antiquities Act 16 U.S.C. §§ 461-470 (1982), Park Service Organic Act, 16 U.S.C. §§ 1-2 (1982 and Supp. IV 1986), and Forest Service authority derived from various sections of Title 16.

114. 15 U.S.C. 2615 (1982). Congress sometimes steps directly into the regulatory scheme to protect society against specific substances. See e.g., Toxic Substance Control Act § 15 U.S.C.A. 2605(e) (Supp. 1988) (requiring the Environmental Protection Agency to regulate polychlorinated biphenyls, PCB's). In other statutes the Congress takes a more coercive approach, by including regulatory provisions for certain substances in the statute. These provisions, commonly referred to as hammer clauses, take effect if the Environmental Protection Agency fails to regulate the substances. See e.g., Resource Conservation and Recovery Act § 3008(d), 42 U.S.C.A. § 6928(e) (Supp. 1988) (punishing improper handling, treatment, and storage of "used oil not identified or listed as a hazardous waste").

115. 42 U.S.C. § 6925 (Supp. IV 1986).

116. 7 U.S.C. §§ 136-136y (1982 and Supp. III 1985).

117. 42 U.S.C. § 1910 (1982).

118. H.R. 5225, 100th Cong., 2d Sess. (1988). See also 134 Cong. Rec. H 8351-8354 (1988).

119. 33 U.S.C.A. § 1319(c)(4) (Supp. 1988), Clean Water Act; 42 U.S.C. § 7413(c)(2) (1982), Clean Air Act; and, 42 U.S.C. § 6928(d)(3) (Supp. IV 1986), Resource Conservation and Recovery Act.

120. 33 U.S.C.A. § 1321(b)(5) (Supp. 1988), Clean Water Act. It is interesting to note that for the land release of hazardous substances this was accomplished by Title III of the Superfund Amendment and Reauthorization Act (SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986), Comprehensive Environmental Response, Compensation, and Liability Act codified as amended at 42 U.S.C.A. § 9603 (Supp. 1988). After the Bopal Disaster the Clean Air Act may be modified to include such provisions. See, Wall St. J., Jan. 7, 1985, at 18 and, The New Clean Air Act: Hearings on S. 2203 Before the Committee on Environment and Public Works, 99th Cong., 2d Sess. (1986).

121. See 33 U.S.C.A. § 1319(b) (Supp. 1988), Clean Water Act; 42 U.S.C. § 7413(a) (1982), Clean Air Act; 33 U.S.C. § 1415(a) and (d), Ocean Dumping Act 1982; 42 U.S.C. 6928(c) and (g) (Supp. IV 1986), Resource Conservation and Recovery Act.

122. See Riesel, supra note 9.

123. 18 U.S.C. § 2 (1982).

124. See United States v. Ward, 676 F.2d 94 (4th Cir. 1982), cert. denied, 459 U.S. 835 (1982) and United States v. Johnson Towers, 741 F.2d 662 (3rd Cir. 1984) (The district court's narrow interpretation of "owner and operators" was the principal cause for review in this case, but even the district court agreed that the employees charged had aided and abetted the RCRA violation.), cert. denied sub nom., Angel v. United States, 469 U.S. 1208 (1985). See also McMurray and Ramsey, supra note 13, at 1150 note 97.

125. 18 U.S.C. § 287 (1982).

126. 18 U.S.C. § 641 (1982).

127. United States v. Holley Electric Corp., No. 83-119-Cr.-J-16 (M.D. Fla. 1983) for a detailed recitation of the facts derived from the plea agreement, see, Long, Criminal Prosecution of Environmental Laws: Semi-White Collar Crime, 31 Fed. B. News & J. 266, 269 (1984).

128. 18 U.S.C. § 371 (1982).

129. See, Park, A Subject Matter Approach to Hearsay Reform, 86 Mich. L. Rev. 51 (1987) (discussing the admissibility of co-conspirator's statements).

130. See United States v. Davis, 793 F.2d 246 (10th Cir.), cert. denied, 479 U.S. 931 (1986).

131. 18 U.S.C. § 1001 (1982).

132. United States v. James S. Strecker Jr. et al., (W.D. Wash.), abstracted in 2 Nat'l Env't Enforcement J. 29 (Nov. 1987) and United States v. Jay Woods Oil Co., Inc., (E.D. Mo.), abstracted in 2 Nat'l Env't Enforcement J. 21 (June 1987).

133. See Riesel, supra note 9, at 10071.

134. 18 U.S.C. §§ 1341 and 1342 (1982).

135. United States v. Greer, 850 F.2d 1447 (11th Cir. 1988).

136. 18 U.S.C. § 1505 (1982).

137. See United States v. Vineland Chemical Co., Inc., 692 F. Supp. 415 (D.C.N.J. 1988) (Civil enforcement action against facility which lost interim status). See also, Mays, Hazardous Waste Litigation after the RCRA and CERCLA Amendments of 1987 (1987) 320 PLI/Lit 45, PLI Order No. 114 5018 (1987).

138. 18 U.S.C. §§ 1621-1623 (1982).
139. 33 U.S.C.A. § 1319(b) (Supp. 1988), Clean Water Act; 42 U.S.C. § 7413(a) (1982), Clean Air Act; and, 42 U.S.C. § 6928(a) (Supp. IV 1986), Resource Conservation and Recovery Act.
140. See Muchnicki and Coval, Countering Corporate Obstruction in the Investigation and Prosecution of Environmental Crime, 1 Nat'l. Env'tl. Enforcement J. 3 (July 1986).
141. 18 U.S.C. § 401(3) (1982).
142. United States v. Lynch, (E.D. Mich. 1987), abstracted in 2 Nat'l. Env'tl. Enforcement J. 21 (Sep. 1987).
143. See United States v. Alder Creek Water Co., 823 F.2d 343 (9th Cir. 1987) (quoting United States v. Lingo, 740 F.2d 667, 668 (8th Cir. 1984).
144. 18 U.S.C. § 13 (1982).
145. See infra text accompanying notes 337-341 (federal facility enforcement).
146. 18 U.S.C. §§ 1961-1968 (1982).
147. A. Block and F. Scarpitti, Poisoning America for Profit. The Mafia and Toxic Waste in America (1985), and see also, Profile of Organized Crime: Mid-Atlantic Region, 1983: Hearings Before the Subcommittee on Investigations of the Senate Committee on Governmental Affairs, 98th Cong, 2nd Sess. (1983).
148. Rebovich, Hazardous Waste Crime: A Contextual Analysis of the Offenses and the Offender (1986), and Rebovich, Understanding Hazardous Waste Crime: Multistate Examination of Offense and Offender Characteristics in the Northeast (1986).
149. Rebovich, Criminal Opportunity and the Hazardous Waste Offender: Confronting the Syndicate Control Mystique, 1 Nat'l Env'tl. Enforcement J. 3 (Dec. 1986).
150. See Szasz, supra note 79.
151. United States v. MacDonald & Watson Waste Oil Co. et al., (D.R.I. 1988), abstracted in 3 Nat'l Env'tl. Enforcement J. 25 (June 1988) (fifty-three count racketeering indictment involving fraudulent representations to obtain waste disposal contracts and subsequent illegal disposal).
152. 10 U.S.C. §§ 801-940 (1982).

153. 10 U.S.C. § 934 (1982), Article 134.
154. 10 U.S.C. § 802 (1982), Article 2 and supra note 136 (Federal Assimilative Crimes Act).
155. 10 U.S.C. § 892, Article 92.
156. See Donnelly and Van Ness, supra note 6, at 40.
157. See United States v. White Fuel Corp., 498 F.2d 619 (1974), United States v. United States Steel Corp., 482 F.2d 439 (7th Cir.), cert. denied, 414 U.S. 909 (1973), and United States v. American Cyanamid Co., 480 F.2d 1132 (1974).
158. See Adamo Wrecking Co., v. United States, 434 U.S. 275, 291 (1978) (Stewart, J., dissenting to the Court's narrow interpretation of the term "emission standard" under the version of the Clean Air Act in effect at the time), and United States v. Alexander, 602 F.2d 1228 (5th Cir.) (refusing to extend the protection of the Outer Continental Shelf Act, 43 U.S.C. §§ 1330-1356 (1982) to activities other than "the leasing of the outer continental shelf").
159. See United States v. Hayes Int'l Corp., (mem.) Cr. No. 84-123-N (M.D. Ala. 1984) (imposing "actual knowledge requirement" under the Resource Conservation and Recovery Act), rev'd, 786 F.2d 1499 (11th Cir. 1986). For a detailed discussion of this particular issue suggesting the appeals court action which later occurred, see, Barnes, Environmental Crime: Case Study of Divergent Interpretations of the Scientist Requirement in RCRA's Criminal Provisions, 5 Temp. Env'tl. L. & Tech. J. 3 (1986).
160. Adamo Wrecking Co., v. United States, 434 U.S. 275, 291 (1978).
161. Compare United States v. City of Rancho Palos Verdes, 841 F.2d 328 (9th Cir. 1988) (holding that a city is not a "person" within the meaning of the Endangered Species Act, 16 U.S.C. §§ 1531-1543 (1982), with, United States v. Johnson & Towers, 741 F.2d 662 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S. 1208 (1985) (including employees under the "owner or operator" provisions of the Resource Conservation and Recovery Act. 42 U.S.C. §§ 6901-6991 (1982 & Supp. 1986). But cf., Joslyn Corp., v. T.L. James & Co., 696 F. Supp. 222 (W.D. La. 1988) (refusing to broaden the term "owner or operator" to pierce the corporate veil in a Superfund recovery action).
162. United States v. City of Rancho Palos Verdes, 841 F.2d 329, 331 (9th Cir. 1988). It is interesting to note that in the early days of criminal enforcement liberal interpretation of

statutes aimed at natural persons were required in order to impose sanctions on corporations. See, United States v. Houglan Barge Line, Inc., 387 F. Supp. 1110 (W.D. Penn. 1974).

163. United States v. Johnson & Towers, Inc., 741 F.2d 662 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S.1208 (1985). This was an unusual case in several respects Peter Angel was a defendant in the original prosecution, who contended that the Act could not be applied to individual defendants after the defendant corporation pled guilty. This is at least unusual since the Act contains provisions for imprisonment which could not apply to corporate persons. What is even more unusual is that the District Court agreed with this interpretation.

164. See United States v. Greer, 850 F.2d 1447 (11th Cir. 1988) and United States v. Hayes Int'l Corp., 786 F.2d 1499 (11th Cir. 1986).

165. See Mix, supra note 21, and Barnes, supra note 151. The issue of the appropriate standard of mens rea for malum prohibitum environmental crimes appears to be a significant issue in other common law countries as well. See, Fisher, Environment Protection and the Criminal Law, 5 Crim. L. J. 184, 191 (1981).

166. See Supra text accompanying notes 25-30 (Refuse Act enforcement).

167. Morris, supra note 26, at 426, Tripp and Hall, supra note 24, at 75 and Glenn, supra note 24, at 871. For a discussion of more modern constitutional concerns regarding statutes which abandon "mens rea" altogether in favor of "a responsible relation to a public danger", a topic beyond the scope of this inquiry, see, Jeffries and Stephan, Defenses, Presumptions, and Burden of Proof in the Criminal Law, 88 Yale L.J. 1325, 1374 (1979).

168. Black's Law Dictionary 1512 (4th ed. 1968).

169. Glenn, supra note 24, at 867.

170. See cases cited supra note 67 (prosecutions under the Clean Water Act).

171. Water Quality Act of 1987 §312(c)(1) and (2) (codified as 33 U.S.C.A. §1319(c)(1) and (2)).

172. See Starr, supra note 11, at 1152 (citing United States v. Illinois Cent. R.R. Co., 303 U.S. 239 (1938), but see, Riesel, supra note 9, at 10071 (citing various cases to support a distinction).

173. See case cited supra note 67.

174. See Supra text accompanying notes 96-101. The Clean Air Act contains a unique provision which permits federal criminal actions for violations of state implementation plans (SIP's) only after a 30 day warning period beginning with the notice of violation (NOV), 42 U.S.C. § 7413(c)(1)(A) (1982), and the Toxic Substances Control Act prohibits "knowing or willful violations." 15 U.S.C. 2615(b) (1982).

175. See McMurry and Ramsey, supra note 13, at 1151-52, and Riesel, supra note 9, at 10071-72.

176. See 33 U.S.C.A. § 1319 (Supp. 1988) and 18 U.S.C. § 3559 (Supp. IV 1986), but repeat Offenders under the negligence provisions of the act are subject to felony punishments.

177. Compare United States v. Johnson & Towers, Inc., 741 F.2d 662, 664 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S.1208 (1985), with, United States v. Hayes Int'l. Corp., 786 F.2d 1499 (11th Cir. 1986).

178. 18 U.S.C. § 3771 (1982).

179. Fed. R. Crim. P. 29(a). Such actions by a federal district judge are obviously appealable by the government, but the Circuit Courts of Appeal do not agree on the level of deference owed to the decision of the trial court. Compare United States v. Greer, 850 F.2d 1447 (11th Cir. 1988)(no deference), United States v. Singleton, 702 F.2d 1159 (D.C. Cir. 1983)(no deference), and United States v. Burns, 597 F.2d 939, 941 (5th Cir. 1979) (no deference) with, United States v. Steed, 674 F.2d 284 (4th Cir.), cert. denied, 459 U.S. 829 (same deference allotted judgments of acquittal prior to jury verdict).

180. Supra note 124 (aiding and abetting), and United States v. Johnson & Towers, Inc., 741 F.2d 662, 664 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S.1208 (1985).

181. United States v. Johnson & Towers, Inc., 741 F.2d 662, 670 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S.1208 (1985).

182. United States v. Johnson & Towers, Inc., 741 F.2d 662, 669 (3rd Cir. 1984), cert. denied sub nom., Angel v. United States, 469 U.S.1208 (1985). See also McMurray and Ramsey, supra note 13.

183. United States v. Int'l Mineral and Chem. Corp., 402 U.S. 563 (1971) and cases cited therein (holding that probability of regulation may be the basis for inferences of guilty knowledge).
184. United States v. Johnson & Towers, Inc., 741 F.2d 662, 669 (3rd Cir. 1984), cert. denied sub nom., 469 U.S.1208 (1985).
185. 42 U.S.C. § 6928(d) (Supp. IV 1986). United States v. Johnson & Towers, Inc., 741 F.2d 662, 669 (3rd Cir. 1984), cert. denied sub nom., 469 U.S.1208 (1985)., accord United States v. Hayes Int'l, Corp., 786 F.2d 1499, 1503-1504 (11th Cir. 1986).
186. United States v. Johnson & Towers, Inc., 741 F.2d 662, 670 (3rd Cir. 1984), cert. denied sub nom., 469 U.S.1208 (1985).., and United States v. Hayes Int'l, Corp., 786 F.2d 1499, 1505 (11th Cir. 1986).
187. United States v. Johnson & Towers, Inc., 741 F.2d 662, 669 (3rd Cir. 1984) (quoting United States v. Int'l Mineral and Chem. Corp., 402 U.S. 563, 569 (1971)), cert. denied sub nom., 469 U.S.1208 (1985).
188. United States v. Hayes Int'l, Corp., 786 F.2d 1499, 1504 (11th Cir. 1986).
189. See supra text accompanying notes 93-95.
190. 33 U.S.C.A. § 1319(c)(3)(A) (Supp. 1988), Clean Water Act and 42 U.S.C. § 6928(e) (Supp. IV 1986), Resource Conservation and Recovery Act.
191. 33 U.S.C.A. § 1319(c)(3)(B) (Supp. 1988), Clean Water Act and 42 U.S.C. § 6928(f) (Supp. IV 1986), Resource Conservation and Recovery Act.
192. United States v. Cuyahoga Wrecking Corp. Et al., (D.Md. 1988)(guilty pleas, pursuant to plea bargains, by four of five potential co-defendants and conviction of the fifth, despite his assertions of innocent participation, for hazardous waste violations), abstracted in 3 Nat'l Evtl. Enforcement J. 29 (May 1988).
193. See e.g. United States v. Greer, 850 F.2d 1447 (11th Cir. 1988) (conviction for illegal dumping of hazardous waste and false statements), and United States v. Custom Engineering, Inc., (N.D. Cal. 1987) (convictions for mail fraud and falsification of of emission tests in conjunction with "gray market" automobile modification) abstracted in 2 Nat'l Evtl. Enforcement J. 21 (June 1987).

194. United States v. Hayes Int'l. Corp., 786 F.2d 1499, 1505 (11th Cir. 1986). See also Jefferies and Stephan, Defense. Presumptions, and Burden of Proof in the Criminal Law, 88 Yale L.J. 1325, 1372 (1979).

195. K. Davis, Administrative Law Text §§ 5.03-5.06.

196. 2 K. Davis, Administrative Law Treatise §§ 7:12-7:13 (2d ed. 1979) (citing Report of the Attorney General's Committee on Administrative Procedure). Professor Davis calls this distinction "troublesome".

197. 15 U.S.C. § 2605(a) (1982). Even this statute contains a very limited review preclusion provision on rule making procedures.

198. 33 U.S.C.A. § 1369(b)(1) (Supp. 1988), Clean Water Act, 42 U.S.C. § 7607(b) (1982), Clean Air Act, 42 U.S.C. § 6976 (Supp. IV 1986), Resource Conservation and Recovery Act, and 42 U.S.C. § 9613(a) (Supp. IV 1986), Comprehensive Environmental Response, Compensation, and Liability Act. For a lengthy discussion of these provisions prior to the 1987 amendment to the Clean Water Act, infra note 215, see Review of Criminal Provisions in Environmental Law: Task Force Report, 40 Bus. Law. 761 (1985) [hereinafter Task Force Report].

199. Task Force Report, supra note 198, at 762.

200. 42 U.S.C. § 6976 (Supp. IV 1986), Resource Conservation and Recovery Act and 42 U.S.C. § 9613(a) (Supp. IV 1986), Comprehensive Environmental Response, Compensation, and Liability Act.

201. Starr, supra note 11. See also, Habicht, supra note 11, and McMurry and Ramsey, supra note 13 (all noting the significant increase in hazardous waste enforcement actions and the complete circle of environmental regulatory authority established for the Environmental Protection Agency (EPA) by the statutes as amended).

202. Harrison v. PPG Indus., 446 U.S. 578, 594 (1980) (Powell, J., concurring).

203. The question of the proper court and venue for judicial review of Environmental Protection Agency regulations has been called "perplexing". Task Force Report, supra note 198, at 762. This description is an understatement. Luckily for author and reader, direct consideration of the venue issue is beyond the scope of this paper, but recent efforts to resolve the issue include amendments to the Clean Water Act § 509(b)(3), 33 U.S.C.A. 1369(b)(3) (Supp 1988), which was almost immediately superceded by a general "lottery statute"

for resolving venue for multiple petitions filed in various circuit courts of appeal, Selection of Court for Multiple Appeals, Pub. L. No. 100-236, §§ 1-3, 101 Stat. 1731-32 (1988).

204. See Adamo Wrecking Co., v. United States, 434 U.S. 273, 278-279 (1978). The very narrow construction of the term "emission standard" under the Clean Air Act applied in avoiding the review preclusion issue was the subject of considerable interest and congressional action, § 112(e)(5), 42 U.S.C. § 7412(e)(5) (1986).

205. Yakus v. United States, 321 U.S. 414 (1944) (The extensive citation to the Emergency Price Control Act, quoted within the opinion would be of little modern value and is consequently omitted.) and Adamo Wrecking Co. v. United States, 434 U.S. 291, 289-291 (1978) (Powell, J., concurring).

206. Yakus v. United States, 321 U. S. 414, 460 (1944) (Roberts, J., dissenting).

207. See P. Irons, Justice at War (1983) (a detailed treatment of one of the most criticized exercises of the "War Power", the relocation and punishment of Japanese-Americans during WWII), but cf. Sullivan, Book Essay, 60 Notre Dame L. Rev. 237 (1984-85) (noting the slanted views contained in the book).

208. Yakus v. United States, 321 U.S. 414 (1944) (Rutledge, J., dissenting). See also, Adamo Wrecking Co. v. United States, 434 U.S. 279, 290-291 (1978) (Powell, J., concurring) Justice Powell also recognized Justice Rutledge's "eloquent" framing of the issue.

209. Adamo Wrecking Co., v. United States, 434 U.S. 273, 291-92 (1978) (Powell, J., concurring).

210. Task Force Report, *supra* note 198, at 761.

211. U.S. Cont. amend. V.

212. K. Davis, *supra* note 196 and Adamo Wrecking Co., v. United States: Supreme Court Limits Scope of Clean Air Act Emission Standards, 8 *Envtl. L. Rev.* 895 (1978) (supporting Justice Stevens' dissenting view that the rule in question was a long-standing interpretation well within EPA's statutory authority).

213. Compare General Motors v. Ruckelshaus, 724 F.2d 1561 (D.C. Cir. 1984) (en banc). cert. denied 471 U.S. 1074 (1985) with, Harrison v. PPG Indus., Inc., 446 U.S. 578 (1980). The distinction between legislative and interpretive rules which would appear very relevant in divining congressional intent was ignored by the Supreme Court.

214. See F. Davis, Judicial Review of Rulemaking: New Patterns and New Problems, 1981 Duke L.J. 283, 294-295.
215. See Clean Water Act § 509(b)(1), 33 U.S.C.A. § 1369(b)(1) (Supp. 1988) (extending review period under the Clean Water Act from 90 to 120 days).
216. Task Force Report, supra note 198, at 774-75.
217. See supra text accompanying notes 195-196 (courts deference to legislative rules). This may already be the case under the Clean Air Act, see Task Force Report, supra note 188.
218. Compare McLouth Steel Products Corp. v. Thomas, 838 F.2d 1317 (D.C. Cir. 1988) (holding the application of a "leachate model" to be a legislative rule), with United States Technologies Corp. v. EPA, 821 F.2d 714 (D.C. Cir. 1987) (holding the corrective action requirement to be an interpretive rule).
219. See United States v. Distler, 671 F.2d 954 (6th Cir. 1981) and United States v. Oxford Royal Mushroom Products Inc., 487 F.Supp. 852 (E.D. Penn. 1980), and United States v. Little Rock Sewer Committee, 460 F.Supp. 852 (E.D. Ark. 1978).
220. United States v. Hayes Int'l Corp., 786 F.2d 1499 (11th Cir. 1986).
221. See United States v. Daniel, 813 F.2d 661 (5th Cir. 1987) (knowledge of proscribed conduct adequate under Attorney General's Schedules of Controlled Substances).
222. United States v. Hayes Int'l Corp., 786 F.2d 1499, 1507 (11th Cir. 1986).
223. See supra text accompanying notes 80-90 (Limitations of Civil Enforcement).
224. See e.g. United States v. General Motors Corp., 403 F. Supp. 1151 (D. Conn. 1975) (\$1 penalty imposed for release of oil under § 113 Federal Water Pollution Control Act, 33 U.S.C. § 1321).
225. See United States v. International Minerals & Chemical Corp., 420 U.S. 563 (1971) (reversing the dismissal of an information alleging violation of Interstate Commerce Commission regulations on the shipment of certain acids), and United States v. Udofot, 711 F.2d 831 (8th Cir.) (conviction for knowing delivery of firearms to a carrier), cert. denied, 464 U.S. 896 (1983). A similar parallel may be drawn to offenses involving illicit drugs. See, United States v. Daniel, 813 F.2d 661 (5th Cir. 1987) (reclassification of certain controlled

substances did not deprive defendant of knowledge of proscribed conduct).

226. United States v. Johnson Towers Inc., 741 F.2d 662 (3d Cir. 1984) (citing, United States v. International Minerals & Chemical Corp., 402 U.S. 558 (1971)), cert. denied sub nom., Angel v. United States, 469 U.S. 1208 (1985). In prosecutorial shorthand we might refer to the "knowing" offenses under environmental statutes as "general intent crimes".

227. Riesel, supra note 9, at 10065.

228. United States v. Hercules, Inc., Sunflower Army Ammunition Plant, 335 F. Supp. 102, 104 (D. Ka. 1971).

229. See Jeffries and Stephan, supra note 194.

230. See Wayte v. United States, 470 U.S. 598 (1985). (Government's "passive enforcement policy" did not preclude prosecution of individual who failed to register under selective service regulations.)

231. United States V. Pennsylvania Industrial Chemical Corp., 411 U.S. 655, 674 (1973).

232. Marzulla, supra note 10.

233. See United States V. Pennsylvania Industrial Chemical Corp., 411 U.S. 655, 674-75 (1973).

234. United States v. Hanford Sands Inc., 575 F. Supp. 733 (D. Md. 1983) (A civil penalty action under the Clean Air Act, 42 U.S.C. § 7413(a) (Supp. 1986), in which defendant's cooperation with state officials was raised as a defense.).

235. See infra text accompanying notes 255-259 (affirmative defenses in civil enforcement actions).

236. See supra note 99 (knowing endangerment offenses).

237. See Resource Conservation and Recovery Act, 42 U.S.C. § 6928(f)(3) (Supp. 1986), and 33 U.S.C.A. § 1319(c)(3)(B) (Supp. 1988).

238. See supra note 101 (discussing the leapfrogging of environmental statutes). Apparently the Clean Water Act Amendments did not follow this trend entirely. The amendments do not include portions of the Resource Energy and Conservation Act provision for defenses. Compare Resource Conservation and Recovery Act, 42 U.S.C. § 6928(f)(3) (Supp. 1986) with Clean Water Act as amended, 33 U.S.C.A. § 1319(c)(3)(B) (Supp. 1988).

239. Resource Conservation and Recovery Act, 42 U.S.C. § 6928(f)(3)(A) and (B) (Supp. 1986).
240. See Allen, Structuring Jury Decisionmaking in Criminal Cases: A Unified Constitutional Approach to Evidentiary Devices, 94 Harv. L. Rev. 321, 327 (1980). (discussing the functional similarity of evidentiary devices and affirmative defenses).
241. Resource Conservation and Recovery Act, 42 U.S.C. § 6928(f)(4) (Supp. 1986).
242. See, Riesel, supra note 9.
243. See infra text accompanying notes 324-327 (federal facility compliance).
244. See Muchnickl and Coval, supra note 140.
245. See Apex Oil v. United States, 530 F.2d 1291 (8th Cir.), cert denied, 429 U.S. 827 (1976), but see, United States v. Georgetown University, 331 F. Supp. 69 (D.D.C. 1971) (corporation acquitted when employee's acts were at direction of third party contractor). The doctrine of "deliberate avoidance" and an associated jury instructions may theoretically be used to assist in proof of corporate knowledge, but factual inference may be the better prosecutorial approach, because such an instruction would require proof of specific knowledge toward proving what may only be a general intent crime. See, United States v. Pacific Hide and Fur Depot Inc., 768 F.2d 1096 (9th Cir. 1985) (Then Judge Kennedy writing for a panel which concluded that the evidence did not support a "deliberate avoidance" instruction).
246. 33 U.S.C.A. § 1319(c)(5) (Supp. 1988), Clean Water Act codification of the concept, and Habicht, supra note 11, at 10484. See also McMurray and Ramsey, supra note 13, at 1152 citing a far-reaching analogy to the war crimes trial of General Yamashita drawn in Comment, The Criminal Responsibility of the Corporate Officials for Pollution of the Environment, 37 Alb. L. Rev. 61 (1972).
247. United States v. Hayes Int'l Corp., 786 F.2d 1499 (11th Cir. 1986) (as to conviction of defendant Beasley).
248. See 10 U.S.C. § 892 (1982) (disobedience of a lawful order and dereliction of duty).
249. 42 U.S.C. § 9607(b) (1982).

250. See United States v. White Fuel Corp., 498 F.2d 619 (5th Cir. 1974) (acts of others recognized, in dicta, as a defense under the Refuse Act but defense factually rejected).

251. Magnuson, The Nuclear Scandal, Time, Oct. 31, 1988.

252. This issue certainly has much broader constitutional implications, see Washington Post, Nov. 20, 1988 at A7. (The prosecutions arising from the Iran-Contra Affair may raise more questions than they answer.)

253. For example an "act of war" defense similar to the one recognized by statute in Superfund liability actions, 42 U.S.C. § 9607 (1982), is obviously well-founded.

254. 33 U.S.C. § 1323 (1982), Clean Water Act; 42 U.S.C. § 6991f (Supp. IV 1986), Resource Conservation and Recovery Act; and, 42 U.S.C. § 7606 (1982), Clean Air Act. Perhaps the conclusion in the text is far too simplistic, but it appears ludicrous to assert that the courts should recognize, absent statutory authority, any individual's or agency's right to determine which laws are not in the national interest and then ignore them. Such concerns may be appropriate for the Machiavellian process of determining an appropriate sentence. They have no place in proceedings conducted to establish guilt.

255. See e.g., Clean Water Act, 33 U.S.C.A. 1319(d) (Supp. 1988).

256. 33 U.S.C.A. § 1319(d) (Supp. 1988), Clean Water Act. Similar but even more complex calculations are required by the Clean Air Act, 42 U.S.C. § 7420 (1982).

257. See supra text accompanying notes 96-98 (discussing United States v. Tull).

258. See United States v. Tull, 481 U.S. 412 (1987), but see Whitt v. Goodyear Tire & Rubber Co., 676 F. Supp. 1119 (1987) (district court refuses to extend requirement for jury trial to relief which Congress described as equitable under Employee Retirement Income Security Act, 29 U.S.C.A. § 1001 (1988) despite monetary judgement which would naturally result).

259. See Riesel, supra note 9, at 10067, citing Glenn, supra note 24.

260. See Drayton, supra note 35.

261. Fed. R. Crim. P. 18. Generally the appropriate venue is the federal district in which the offense was committed, but provisions have been made for unusual circumstances, 18 U.S.C. §§ 3237 (offenses crossing district boundaries) and 3238

(offenses committed outside any district, for example on the high seas) (1982).

262. See infra text accompanying notes 270-272 (Federal Tort Claim Act challenge).

263. United States v. Frezzo Bros. Inc., 602 F.2d 1123 (3d Cir. 1979).

264. United States v. Eureka Pipeline Co., 401 F. Supp. 934 (N.D.W.V. 1975).

265. See United States v. Ward, 448 U.S. 254 (1980). This determination was extremely important to the Clean Water Act enforcement scheme and will be equally important to the reporting requirements under The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C.A. § 9603 (Supp. 1988).

266. See Marzulla, supra note 10.

267. United States v. Phelps Dodge Corp., 391 F. Supp. 1181 (D.C. Ariz. 1975).

268. See infra text accompanying notes 287-295 (Evidentiary issues in parallel enforcement).

269. Ward, Criminal Enforcement of Illinois' Environmental Protection Laws: Will Criminal Sanctions Enhance or Hinder the State's Goal of a Healthful Environment, 51 Chi. Kent L. Rev. 287, 292 (1982). See also Drayton, supra note 35 and Laughran, supra note 8, at 585.

270. Riesel, supra note 9, at 10075 (calling the grand jury the "great investigatory engine of government"). See also United States v. Royal Mushroom Products, Inc., 487 F. Supp. 852 (E.D. Penn. 1980), citing, United States v. Birdman, 602 F.2d 547 (3d Cir. 1979), cert. denied, 444 U.S. 1032 (1980).

271. See McMurry and Ramsey, supra note 13, at 1142.

272. Fed. R. Crim. P. 7(b).

273. 42 U.S.C. § 7413(c) (1982)(Clean Air Act), and 33 U.S.C.A. § 1319(c) (Supp. 1988)(Clean Water Act).

274. Fed. R. Crim. P. 7(a).

275. See United States v. Gold, 470 F. Supp 1336 (1979) (Indictment dismissed when EPA attorney testified about suspected false statements to grand jury and then served as a "special attorney" to prosecute), but see United States v.

Gakoumis, 624 F. Supp. 655 (E.D. Pa. 1985) (disagreeing with the broad scope of the Gold decision and allowing indictment to stand despite procedural errors by the U.S. attorney), aff'd, 802 F.2d 449 (3rd Cir. 1986).

276. Marzulla, supra note 10, see also Riesel, supra note 9.

277. U.S. Const. amend. V.

278. See Riesel, supra note 9 and Habicht, supra note 11.

279. 28 U.S.C. §§ 3161-3174 (1982 and Supp. IV 1986).

280. See Starr, supra note 11, at 385 and note 15.

281. United States v. K.W. Thompson Tool Co., Inc., 836 F.2d 721 (1st Cir. 1988).

282. See supra text accompanying notes 227-230 (discussing selective prosecution).

283. United States v. K.W. Thompson Tool Co., Inc., 836 F.2d 721, 729 (1st Cir. 1988). The court also allowed sanctions imposed on the plaintiff under Fed. R. Civ. P. 11 for assertions of frivolous claims against Environmental Protection Agency employees to stand.

284. U.S. Const. amend. IV and V. A discussion of the great body of law which has grown up around these two provisions is far beyond our needs, but it interesting to note the growing trend toward simplifying the application of their protection. See United States v. Dunn, 480 U.S. 294 (1987).

285. See infra notes 294-295 (potential for use of evidence discovered by administrative inspectors).

286. See statutes cited supra note 119.

287. 42 U.S.C.A. § 9603(b) . (Supp. 1988) and Clean Water Act, 33 U.S.C. 1321(b)(5) (1982). Logically the statutes do not preclude the use of such reports in prosecutions for false statements or perjury. The government bears the burden of avoiding the statutory immunity when it seeks to introduce evidence of the discharge or release. See, United States v. General American Transportation Corp., 367 F. Supp. 1284 (D.N.J. 1973).

288. See, United States v. Pacific Hide & Fur Depot, Inc., 768 F.2d 1096 (9th Cir. 1985) (statements obtained by EPA in overseeing administration of "Junkyard" permit admitted in a criminal prosecution under the Toxic Substances Control Act §§ 5(e) and 15(b), 5 U.S.C. §§ 2605(e) and 2615(b), for improper disposal of polychlorinated biphenyls, PCB).

289. Department of Justice, Land and Natural Resources Division Directive No. 5-87, Oct. 13, 1987. For a detailed explanation of the directive, see Marzulla, supra note 10.

290. Fed. R. Crim. P. 6(e)(3)(C)(i). See also Riesel, supra note 9 at 10078 and cases cited therein.

291. For a detailed discussion of this issue, see Marzulla, supra note 10, at 2.

292. See Marzulla, supra note 10, at 7 and cases cited therein.

293. There is some confusion on this issue, but the obvious distinction from the "probable cause warrant" required in solely criminal investigations is enough for our purposes. See, Welks, The Fourth Amendment and the Third Warrant, 2 Nat'l. Envtl. Enforcement J. 3 (1987).

294. Dow Chemical Co. v. United States, 476 U.S. 227 (1986) (interpreting § 114 of the Clean Air Act, 42 U.S.C.A. § 7414 (Supp. 1988))

295. The decision in Dow Chemical has been criticized as demanding "that we as a society forego rights that are too precious to relinquish." Note, Dow Chemical Co. v. United States: Aerial Surveillance and The Fourth Amendment, 3 Pace Envtl. L. Rev. 277, 296 (1986) (authored by Diane Fosenwasser Skalak). One might note that similar arguments can be made for the loss of property rights associated with the limitations on business activities necessary to protect the environment. In the future businesses which engage in conduct, which must of necessity be pervasively regulated, should expect little or no privacy. See New York v. Burger, ___ U.S. ___, 107 S. Ct. 2636 (1987) (upholding the admissibility of evidence seized during a warrantless administrative inspection of an automobile junkyard in a prosecution for possession of stolen property).

296. Air Pollution Variance Board of the State of Colorado v. Western Alfalfa Corp., 416 U.S. 861 (1984).

297. See, Henz, The Ringelmann Number as an Irrebuttable Presumption of Guilt - an Outdated Concept, 3 Nat. Resources L. 232 (1970).

298. See, Ruckelshaus, supra note 4, at 459.

299. Henz, supra note 297.
300. See Habicht, supra note 11, at 10481.
301. See supra text accompanying notes 25-30 (Refuse Act enforcement).
302. It can truly be said that in the land of opportunity ingenuity even in criminal enterprise knows no bounds. See United States v. Ward, 676 F.2d 94 (4th Cir. 1982) (The defendant's use of a tank truck to "water" the road sides of North Carolina with waste oil contaminated with Polychlorinated Biphenyls (PCB) is the classic example.) But there appears to be no end to it. The indictment in United States v. DAR Construction, Inc., (S.D.N.Y. 1988), abstracted in 3 Nat'l Env'tl. Enforcement J. 22 (Apr. 1988), charges the illegal disposal of asbestos, packed into disposal bags turned inside out to hide the warning labels, into a private apartment building dumpster.
303. Of course not all the criminals showed the same levels of creativity some simply and illegally dumped "it" down the drain. See, e.g., United States v. Distler, 9 Env'tl. L. Rep. (Env'tl. L. Inst.) 20700 (W.D. KY. 1979) (discharge of pesticide waste into Louisville, Kentucky city sewer system), aff'd, 671 F.2d 954 (6th Cir.), cert. denied, 454 U.S. 827 (1981).
304. See supra note 201 (complete circle of regulation).
305. See Reiss, Compliance Without Coercion, 83 Mich. L. Rev. 813 (1985). Ostensibly a book review of Hawkins, Environment and Enforcement: Regulation and the Social Definition of Pollution (1985), this brief article points up the danger that enforcement agents "will do their own justice" if the imposition of sanctions is not uniform.
306. 42 U.S.C. §§ 6922-6924 (Supp.IV 1986).
307. See Ruckelshaus, supra note 4.
308. See statutes cited supra note 99. (knowing endangerment provisions).
309. See Habicht, supra note 11, at 10482, and McMurry and Ramsey, supra note 13, at 1141.
310. See Habicht, supra note 11, citing United States v. A.C. Lawrence Leather Co., No. Cr. 82-00037 (D.N.H. 1983). (This leather tanning company took Environmental Protection Agency money to study treatment of tannery waste while deliberately pumping raw waste directly into a local river in violation of Clean Water Act.)

311. See Reiss, supra note 305.

312. See supra text accompanying note 84. (minimal civil penalties as a license to pollute)

313. The primary example of the Environmental Protection Agency's reluctance to invoke injunctive relief may be electric power generation. See Durant, When Government Regulates Itself (EPA, TVA, and Pollution Control in the 1970s) (1985). As to the alleged effect of economic penalties, which in reality is usually combined with other economic factors, see, Laughran, supra note 8, at 585, and Drayton, supra note 35.

314. See Mix, supra note 21.

315. United States v. Vineland Chemical Co., Inc., 692 F. Supp. 415 (D.N.J. 1988) (civil enforcement action for violations after loss of interim status). See also, Mays, supra note 137. (Literally hundreds of facilities have already lost their interim status, and closure plan violations are obviously very common.)

316. Compare H.R. Rep. No. 198(I), 98th Cong., 2d Sess. 19, reprinted in 1984 U.S. Code Cong. & Admin. News 5576, 5578 (describing the Resource Conservation and Recovery Act regulatory system as one of "unparalleled scope and complexity") with H.R. Rep. No. 1016(I), 96th Cong., 2d Sess. 72, reprinted in 1980 U.S. Code Cong. & Admin. News 6174 (dissenting views of Representatives Stockman and Loeffler referring to the potential regulatory scheme as an "undirected regulatory blunderbuss").

317. Mix, supra note 21, at 90.

318. Ruckelshaus, supra note 4, at 458.

319. Manley, Federalism and Management of the Environment, 19 Urb. Law. 661, 664 (1987)

320. Ruckelshaus, supra note 4, at 458.

321. McElfish, supra note 49.

322. Exec. Order No. 11514, 3 C.F.R. 902 (1970) and Exec. Order No. 12088, 3 C.F.R. 243 (1978) reprinted in 42 U.S.C. § 4321 note (1982).

323. Note, How Well Can States Enforce Their Environmental Laws When the Polluter is the United States Government, supra note 19, at 123, citing Washington Post, Aug. 17, 1983, at A1.

324. See Mix, supra note 21, at 90.
325. California v. Walters, 751 F.2d 977 (9th Cir. 1985) (per curiam).
326. Id. at 978.
327. Resource Conservation and Recovery Act § 6001 as amended (codified at 42 U.S.C. 6961 (1986)). The proposed Health Waste Anti-Dumping Act, see supra note 118, would close this loophole in the regulatory scheme.
328. 28 U.S.C. § 1331 (1982).
329. 28 U.S.C. § 1442 (1982), A companion provision provides removal authority for cases involving members of the armed forces, 28 U.S.C. § 1442a (1982)d, The statutes have been held not to be mutually exclusive, Colorado v. Maxwell, 125 F. Supp. 18 (D.C. Co. 1954). The court in Walters was careful to limit its removal holding because the issue is not one of first impression. The extent to which removal is available may be decided in California v. Mesa, 813 F.2d 960 (9th Cir. 1987), cert. granted, ___ U.S. ___, 108 S.Ct. 1993 (1988) (denial of removal to mail carriers cited for speeding under state law).
330. Fed. R. Crim. P. 81(c).
331. California v. Walters, 751 F.2d 977, 978 (9th Cir.1985) (per curiam).
332. Hancock v. Train, 426 U.S. 167 (1976) (rejecting state claim that Clean Air Act as then in force required federal installations to obtain state emission permits)
333. California v. Walters, 751 F.2d 977, 979 (9th Cir.1985) (per curiam).
334. See Meyer v. United States Coast Guard, 644 F. Supp. 221 (E.D.N.C. 1986), McClellan Ecological Seepage Situation (MESS) v. Weinberger, 655 F. Supp. 601 (E.D. Cal. 1986), and State of Florida Dept. of Environmental Regulation v. Silver Corp., 606 F. Supp. 159 (M.D.Fla. 1985), Contra, State of Ohio v. United States Department of Energy, 689 F. Supp. 760 (S.D. Ohio 1988)(finding a waiver of sovereign immunity for imposition of state civil penalties under RCRA)
335. California v. Walters, 751 F.2d 977 (9th Cir. 1985) (per curiam).
336. See Kenison, Donovan, and Mulligan, Enforcement of State Environmental Laws Against Federal Facilities, 1 Nat'l Env'tl. Enforcement J. 3 (Nov. 1986). For a more general analysis of

modern federalism, see Stephenson and Levine, Vicarious Federalism: The Modern Supreme Court and the Tenth Amendment, 19 Urb. Law. 683 (1987).

337. Environmental Compliance by Federal Agencies: Hearings before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce, 100th Cong. 1st Sess. (1987).

338. Federal Facilities Compliance Strategy (The Yellow Book), (1988)(November 1988 publication available from EPA).

339. See Reiss, supra note 305.

340. Environmental Compliance by Federal Agencies: Hearings before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce, 100 Cong., 1st Sess. (1987).

341. U.S. Const. art. III.

342. California v. Department of the Navy, 845 F.2d 222 (1988).

343. Nippon Hodo Co. Ltd., v. United States, 285 F.2d 766 (Ct. Cl. 1961), citing, Herbert, Uncommon Law 291-296 (1969 edition).

344. 134 Cong. Rec. H 11610 (1987).

345. H.R. 3782, 100th Cong., 1st Sess. (1987)

346. The latter type of criminal enforcement has a long history, it needs only to be rediscovered. See United States v. Hercules, Inc., Sunflower Army Ammunition Plant, 335 F. Supp. 102 (D. Kan. 1971) (Refuse Act prosecution of government contractor).

347. United States v. Dee (D.C. Md. 1988) (indictment of three civilian employees of the Army's Aberdeen Proving Grounds). See also Washington Post, Jun. 29, 1988, at B1, B7 and Baltimore Sun, Jun. 29, 1988 at 1, 15, 17. The reader is asked to recall the common admonitions concerning press reports.

348. See Hill, Whistleblower: A Study in Alternative Remedies, 4 Temp. Envtl. L. and Tech. J. 50 (1985). Congressional efforts in this regard are meeting some difficulty. See Washington Post, Oct. 27, 1988 at A1, A10 (Workers' Protection Bill Dies).

349. 33 U.S.C. § 1367 (1982), Clean Water Act; 42 U.S.C. § 6971 (1982), Resource Conservation and Recovery Act; 42 U.S.C. § 7622 (1982), Clean Air Act; and, 42 U.S.C. § 9610 (1982), Comprehensive Environmental Response, Compensation, and Liability Act.

350. See N. Frank, supra note 16.

351. See supra note 49. The Federal Sentencing Guidelines, Fed. Sent. Guide 2Q1.1-2Q1.4, though under attack on other grounds, United States v. Mistretta, 682 F. Supp.1033 (D.C.W.D. Mo.), cert granted, ___ U.S.___, 108B S. Ct. 2868, reach the same conclusion.

352. See supra note 95 and accompanying text. (Clean Air Act revisions).

353. See Laughran, supra note 8, at 585-58.

354. See McCarthy and Farrell, The Watch We Keep: Prosecutorial Strategy for Ground Water Protection, 2 Nat'l Env'tl. Enforcement J. 3 (June 1987)(suggesting comprehensive criminal enforcement as a means to effectively protect ground water).