ENVIRONMENTAL CRIME COMES OF AGE:
THE EVOLUTION OF CRIMINAL ENFORCEMENT
IN THE ENVIRONMENTAL REGULATORY SCHEME

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I. INTRODUCTION

The Rivers and Harbors Act of 1899 often is considered the first environmental criminal statute because it contains strict liability provisions that make it a misdemeanor to discharge refuse into navigable waters of the United States without a permit.\(^1\) When Congress passed the Rivers and Harbors Act, however, it was far more concerned with preventing interference with interstate commerce than environmental protection. For practical purposes, the environmental crimes program in the United States dates to the development of the modern environmental regulatory system during the 1970s, and amendments to the environmental laws during the 1980s, which upgraded criminal violations of the environmental laws from misdemeanors to felonies.\(^2\)

\(^1\) The discharge prohibition of the Rivers and Harbor Act of 1899 is known as the Refuse Act, 33 U.S.C. § 407 (2006), violations of which are misdemeanors under 33 U.S.C. § 411. The misdemeanor provisions of the Rivers and Harbor Act overlap to a significant degree with the criminal provisions of the Federal Water Pollution Control Act (commonly referred to as the “Clean Water Act”), id. §§ 1251–1387, but contain three notable distinctions. First, the Rivers and Harbors Act only covers discharges into navigable-in-fact waters; the Clean Water Act extends to all waters of the United States. Compare id. § 407 (applicable specifically to “navigable waters”), with id. § 1362(7) (defining “navigable waters” as “waters of the United States”). Second, the Rivers and Harbors Act covers discharges from all sources; the Clean Water Act largely is limited to point source discharges. Compare id. § 407 (covering discharges from “any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind”) with id. § 1362(12) (defining “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source”). Third, the Rivers and Harbors Act does not cover sewage discharges, but the Clean Water Act regulates sewage. Compare id. § 407 (excluding refuse “flowing from . . . sewers”) with id. § 1362(6) (including “sewage” in the definition of “pollutant”).

\(^2\) See infra notes 22–25 and accompanying text.
The enactment and amendments of the federal Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and the Resource Conservation and Recovery Act ("RCRA") during the 1970s and 1980s brought more than the birth of the environmental crimes program in the United States. For the first time, storage or disposal of hazardous waste without a permit or the discharge of pollutants into waters of the United States without a permit was a felony under federal law. Waste management practices that had been legal for decades, and which were standard operating procedures for businesses across America, suddenly could give rise to felony prosecution if committed "knowingly" by corporations and their employees.

As a result, the 1980s brought a series of "firsts" for environmental criminal enforcement: the first felony prosecutions under each of the major environmental laws, the first knowing endangerment cases, and the first jail sentences imposed for environmental crime under the federal sentencing guidelines. In the 1990s, the "firsts" continued as indictments and then trials occurred in federal judicial districts where there had never been environmental crimes prosecutions.

The development of the environmental crimes program involved significant growing pains as federal prosecutors and Environmental Protection Agency ("EPA") criminal investigators struggled to define their respective roles, and Congress investigated claims that political appointees at the Justice Department were interfering with environmental prosecutions. As those issues subsided, judges, defense attorneys, and academics raised questions about the role of criminal enforcement under the environmental laws.

Some critics questioned whether criminal enforcement was appropriate for violations of statutes and regulations that often are mind-numbingly complex.

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5 The crime of knowing endangerment occurs if a defendant commits a substantive violation of the Clean Water Act, the Clean Air Act, or RCRA and "knows at that time that he thereby places another person in imminent danger of death or serious bodily injury ...." Id. § 1319(c)(3)(A); 42 U.S.C. § 6928(e) (2006); see also id. § 7413(c)(5)(A) (using slightly different language).
7 See Kevin A. Gaynor et al., Environmental Criminal Prosecutions: Simple Fixes for a Flawed System, 3 VILL. ENVTL. L.J. 1, 25–27 (1992); Timothy Lynch, Polluting Our
Others raised concerns that the mental state requirements for environmental crimes were minimal and bordered on strict liability, particularly when corporate officials were prosecuted under the "responsible corporate officer" doctrine for environmental crimes. Advocates of criminal enforcement responded that the exercise of prosecutorial discretion would filter out cases that were too technical or where evidence of criminal intent was weak. Nonetheless, commentators protested that the criminal provisions of the environmental laws were too broad, and that Congress had delegated too much authority to prosecutors to decide which environmental violations were criminal.

A common theme of the complaints raised during the 1980s and 1990s about environmental prosecutions was the absence of a meaningful basis for determining what makes an environmental case criminal. In most instances, the act requirement for a criminal prosecution under the environmental laws involves the same conduct that could give rise to civil or administrative enforcement. In terms of statutory elements, the only additional proof required in a criminal prosecution is that the defendant acted with the requisite mental state, which many critics argued was a minimal showing. In all other respects, the same conduct could give rise to criminal, civil, or administrative enforcement, all at the whim of the investigating agency or prosecuting office.

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13 See id. §§ 1319(c)(1)–(2) (requiring a "negligent" or "knowing" mental state for criminal prosecutions).

14 See Coffee, supra note 8, at 217.
In the last decade, the environmental crimes program has thrived. The number of environmental prosecutors grew during the Bush administration, even as other environmental protection efforts faltered, and a consensus emerged that significant environmental violations may warrant criminal enforcement.\(^\text{15}\) As with other regulatory schemes,\(^\text{16}\) criminal enforcement of environmental violations promotes compliance and deters violations because it is more difficult for companies to treat criminal prosecutions as a “cost of doing business.” Corporations that are criminally prosecuted may lose lucrative government contracts and incur damage to their public (and commercial) images, in addition to paying criminal fines, serving probationary terms, and facing other sanctions.\(^\text{17}\) Corporate officials can be criminally prosecuted and face possible incarceration, which may provide a greater deterrent than the threat of either criminal or civil fines imposed against the corporation. Yet despite the potential benefits of criminal enforcement, the historical criticism of environmental prosecution occasionally resurfaces,\(^\text{18}\) and the question of what makes an environmental case criminal remains unanswered.

This Article will reconsider concerns about the role of criminal enforcement under the environmental laws and suggest an answer to the question of what makes an environmental case criminal. Part II examines the “act” requirement and the extent to which the environmental laws focus on conduct that may raise issues for criminal enforcement. Part III addresses mental state requirements under the environmental laws and argues that the “knowingly” requirement is not a reduced mental state, although its application in the environmental context may present challenges. Part IV evaluates the exercise of prosecutorial discretion in environmental cases and suggests that criminal prosecution should be reserved for cases involving (1) significant harm or risk of harm to the environment or public health, (2) deceptive or misleading conduct, (3) deliberate efforts to operate outside the environmental regulatory system, or (4) significant and repetitive violations of environmental laws. Part V concludes that the proper exercise of

\(^{15}\) See David M. Uhlmann, *Strange Bedfellows*, ENVT. L., May-June 2008, at 40–43 (analyzing the paradoxical growth of the environmental crimes program during the Bush Administration).


\(^{17}\) See, e.g., 33 U.S.C. § 1368(a) (2006) (prohibiting federal agencies from entering contracts with any person convicted of a criminal violation under the Clean Water Act until the EPA Administrator certifies that the condition giving rise to the violation has been corrected).

prosecutorial discretion delineates an appropriate role for criminal enforcement under the environmental laws.

II. THE CRIMINALIZATION OF ENVIRONMENTAL VIOLATIONS AND THE "ACT" REQUIREMENT

Congress included criminal provisions in each of the major environmental laws when they were enacted during the 1970s. Initially, the criminal provisions were misdemeanors, and there were relatively few prosecutions. First, the laws were new, and the legal norms they created were not sufficiently well established to justify criminal enforcement, except in the most egregious cases. Second, federal prosecutors and investigators rarely prosecute misdemeanors, instead devoting their limited resources to the matters that Congress has deemed most significant by making them felonies.

The number of criminal prosecutions increased significantly during the 1980s and 1990s, after Congress amended the environmental statutes and elevated most environmental crimes to felonies. The 1984 RCRA amendments created felonies for knowingly treating, storing, or disposing of hazardous waste without a permit from the EPA or an authorized state and for knowingly transporting hazardous waste without a manifest or to a facility that was not authorized to receive hazardous waste. The 1987 Clean Water Act amendments included felony provisions for knowingly discharging pollutants from a point source into waters of the United States without a permit or in violation of a permit, for knowingly making a false statement on a discharge monitoring report (DMR), and for knowingly tampering with or rendering inaccurate a Clean Water Act monitoring method. The 1990 Clean Air Act amendments contained numerous felony provisions, the most significant of which historically has been the knowing release

19 See supra note 4 and accompanying text.
20 See infra notes 22–25 and accompanying text.
21 See Uhlmann, supra note 16, at 198–99. This article focuses on federal prosecutions under the environmental laws, which account for the overwhelming majority of environmental criminal cases prosecuted in the United States.
of hazardous air pollutants in violation of National Emissions Standards for Hazardous Air Pollutants (NESHAPs).\textsuperscript{25}

The criminalization of environmental violations presents challenges conceptually in at least two ways. First, as with other forms of regulatory crime, the moral content of the proscribed conduct is not as well established as it is for common law crime, which has prompted concerns about overcriminalization. Second, the complexity of environmental law raises issues about whether it can be integrated effectively with traditional approaches to criminal liability. This Part addresses each of these issues in turn.

\textit{A. The Morality of Environmental Crime}

The inclusion of criminal provisions in the environmental laws and the subsequent elevation of those crimes to felony status highlighted the seismic shift in pollution control law that accompanied creation of the federal environmental regulatory scheme. When Congress passed the environmental laws, it asserted federal jurisdiction over a wide array of commercial activities that previously were the exclusive province of state law. In addition, by making violations of those laws subject to criminal prosecution, Congress criminalized conduct that previously had been legal and accepted practice in most states.

The criminalization of environmental violations continued a broader trend toward using criminal sanctions to prohibit acts that previously were legal. A threshold concern about criminalization is that individuals may lack sufficient notice that their conduct is prohibited, especially during the years immediately following the creation of "new" crimes. These fairness issues had the potential to be particularly significant for environmental crime because Congress simultaneously authorized a new environmental regulatory scheme and established criminal sanctions for violations of those new regulations. The underlying regulations were not promulgated until after notice and comment from the regulated community, however, and significant criminal enforcement did not occur until environmental crimes became felonies in the 1980s, a decade after enactment of the environmental laws.

A more fundamental concern about criminalization is that it may extend the criminal law beyond its proper role. Long before the 1970s, scholars debated the dangers of "overcriminalization."\textsuperscript{26} Some scholars argued that undue reliance on criminal prohibitions undermines the legitimacy of the criminal sanction by

\footnotesize{\textsuperscript{25} 42 U.S.C. § 7413(c) (1990). In recent years, the EPA and the Justice Department have begun focusing on other Clean Air Act crimes, but asbestos cases remain the largest category of Clean Air Act prosecutions.}

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reducing, if not eliminating, its moral underpinning.\(^{27}\) They posited that the criminal law only should be invoked for morally reprehensible conduct.\(^{28}\) Other scholars, including sociologists, countered that the criminal law provides techniques to achieve social ends, not necessarily dependent upon prevailing notions of morality.\(^{29}\) In addition, to the extent that moral considerations are relevant, they argued that moral culpability and blameworthiness evolve over time within communities.\(^{30}\)

Since the 1970s, the overcriminalization debate has continued,\(^{31}\) fueled by the expansion of the regulatory state and the fact that Congress has been quick to create criminal laws in response to temporary social or political upheaval.\(^{32}\) To some extent, the overcriminalization debate now involves more than different perspectives about the role of morality in the criminal law; the discussion also reflects conflicting views about the role of the federal government and the exercise of its regulatory authority. It therefore is not surprising that environmental crime is cited as an example of overcriminalization.\(^{33}\) Critics of the expansion of federal criminal law describe environmental violations as \textit{malum prohibitum} (a prohibited wrong), as opposed to \textit{malum in se} (inherently wrongful), because the conduct had been legal before the 1970s. They claim that environmental laws subject “otherwise law-abiding” citizens to criminal prosecution for morally neutral conduct.\(^{34}\)

\(^{27}\) See Sayre, supra note 26, at 79–80; Kadish, supra note 26, at 435–40.

\(^{28}\) See Sayre, supra note 26, at 79–80.


\(^{32}\) The American Bar Association reported in 1998 that there were more than 3,300 separate federal crimes in the United States Code, nearly half of them enacted since the 1970s. Task Force on Federalization of Crim. Law, A.B.A., \textit{The Federalization of Criminal Law}, App. C (1998) (James A. Strazzella rpt.).

\(^{33}\) See Rosenzweig, supra note 31, at 11.

\(^{34}\) See Luna, supra note 31, at 709 (citing the imprisonment of a construction supervisor for negligent supervision of an employee who ruptured a pipeline with a backhoe and the criminal conviction of a landowner for “moving sand onto his property without a federal permit”).
A more nuanced view is that environmental crimes do not fit easily within the common law distinctions between conduct that is *malum in se* and *malum prohibitum*, in part because a wide range of conduct is considered environmental crime. Pollution offenses, particularly those that result in harm to the environment and/or public health, may have been *malum in se* from their inception. Congress enacted the environmental laws at a time of significant environmental degradation and widespread concern about pollution prevention. It therefore could be argued that by the 1970s ecological concerns already had altered historical notions about the wrongfulness of pollution. In other words, pollution may have been morally wrong even before Congress made some pollution illegal.

In contrast, paperwork offenses such as recordkeeping or failure to report violations might be characterized as *malum prohibitum*. There was no underlying duty to keep records or report discharges until Congress passed the environmental laws. Yet even when a violation of the law is *malum prohibitum*, the conduct is still wrongful (*malum*) and, inasmuch as the violation involves disobedience of the law, the crime has moral content. In addition, *malum prohibitum* environmental offenses may involve regulations that are as essential to effective environmental protection as those implicated by environmental offenses that are *malum in se*. For example, some reporting obligations enable the government to make permitting decisions with the benefit of complete information about sources of pollution activity; others enable the government to respond quickly to cleanup spills. Absent compliance with those reporting obligations, the government might be limited in its ability to prevent harmful pollution.

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37 See Garbow, supra note 35. Susan Mandiberg observes that evaluating the moral content of environmental violations is challenging because not all pollution is illegal. See Susan F. Mandiberg, *What Does an Environmental Criminal Know?*, 23 NAT. RESOURCES & ENV’T 24, 24–25 (2009). For example, companies may obtain permits under the Clean Water Act that authorize discharges (and hence pollution) as long as the discharges meet permit limits. For this reason, it could be argued that permit violations are more *malum prohibitum* than *malum in se* because it is the quantity or amount of the pollution that is illegal. The decision that some pollution can be tolerated, however, involves a determination that more than the proscribed amount would be harmful to the affected ecosystem. Permit violations, in addition to the harm they may cause directly, upset the delicate balance struck by permitting authorities in determining, for example, the waste load allocation for a waterway (i.e., how much can be discharged while maintaining water quality standards). As a result, permit violations undermine effective environmental protection and may be considered wrongful much like other types of pollution.

38 See Green, supra note 31, at 1573–74 (quoting RONALD DWORIN, TAKING RIGHTS SERIOUSLY 9 (1977)).
Moreover, overcriminalization arguments about environmental crime do not account for the significant sociological changes that have occurred since the 1970s. In the nearly forty years since Congress enacted the environmental laws, an extensive waste management industry has developed. Environmental compliance has become a professional field. Climate change and the deterioration of the global environment have become pressing national and international concerns. In the process, a new generation has come of age, and a new set of societal norms has emerged, both emphasizing the need for greater stewardship of the environment and internalizing the notion that pollution is inherently wrong.\(^{39}\)

Heightened concern about environmental degradation does not resolve all questions about the role of criminal enforcement under the environmental laws, as will be discussed in greater detail in Parts III and IV. Nor does the passage of time necessarily eliminate the challenges presented by the creation of new crimes. (Congress could create criminal provisions that never gain societal acceptance, as occurred during Prohibition.) Overcriminalization arguments about environmental crime, however, devalue the moral content of environmental violations. Many environmental crimes are *malum in se*, and those that are *malum prohibitum* derive moral value from the rule of law and the degree to which they advance the societal goals of pollution prevention. As a result, environmental laws are not in tension with social norms regarding the morality of pollution.

**B. The Complexity of Environmental Crime**

A separate concern about criminal enforcement under the environmental laws involves the complexity of the underlying statutory and regulatory systems. Environmental regulations consume multiple volumes of the Code of Federal Regulations and hundreds (if not thousands) of parts and subparts of those volumes. Critics of environmental criminal enforcement often quote a former EPA Assistant Administrator for the Office of Solid Waste and Emergency Response who stated, "RCRA is a regulatory cuckoo land of definition.... I believe we have five people in the Agency who understand what 'hazardous waste' is."\(^{40}\) Indeed, although RCRA is one of the more difficult environmental regulatory programs, it is by no means the only environmental statute with complex implementing regulations.

Nor are critics of environmental regulation the only commentators who have suggested that the complexity of environmental law raises challenges for criminal

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\(^{39}\) See, e.g., Sidney M. Wolf, *Finding an Environmental Felon Under the Corporate Veil: The Responsible Corporate Officer Doctrine and RCRA*, 9 J. LAND USE & ENVTL. L. 1, 1 (1993) (describing the “growing public consciousness that harm to the environment is a serious crime”); Mandiberg, *supra* note 37, at 28 (discussing how public attitude toward the environment has changed and many now view pollution as wrongful).

environmental enforcement. Richard Lazarus, who has written eloquently about environmental law for more than two decades and is an advocate for strong environmental enforcement, has questioned whether environmental law and criminal law are sufficiently integrated for effective criminal enforcement to occur.\textsuperscript{41} While Professor Lazarus wrote at a time of great upheaval in the environmental crimes program, his argument went beyond temporal problems. Professor Lazarus identified environmental law's complexity as a distinguishing feature that arguably makes it a difficult fit for criminal enforcement.\textsuperscript{42} Professor Lazarus focused on technicality (the scientific underpinnings of environmental law require expertise to master), indeterminacy (the uncertain jurisdictional lines that define what conduct is covered by the environmental laws, and the reality that much of environmental law does not involve prohibitions against pollution, but limits on how much one can lawfully pollute), and obscurity (the volume and density of the various regulatory definitions and concepts).\textsuperscript{43}

Without question, environmental law is complex. Environmental law raises conceptual and practical challenges even for respected scholars and experienced practitioners. Much of environmental regulation involves sophisticated and technologically advanced industrial processes. As a result, at least from a theoretical perspective, environmental law and criminal law could be difficult to integrate effectively. The criminal law demands the violation of clear legal duties; environmental law offers dense regulatory requirements.\textsuperscript{44}

Compounding the potential integration problem, Congress imposed few limits on which environmental regulations could be subject to criminal enforcement. Instead, Congress used broad statutory language that reaches pollution violations (both the failure to obtain required permits and exceeding permit limits) and most paperwork violations, thus criminalizing the failure to comply with relatively obscure recordkeeping and document maintenance requirements. RCRA, for example, makes it a crime to knowingly fail "to file any record, application, manifest, report, or other document required to be maintained or filed for purposes of compliance with regulations promulgated by" the EPA or an authorized State under the statute.\textsuperscript{45} Inasmuch as RCRA established a "cradle-to-grave" regulatory system for hazardous waste, with innumerable document maintenance

\begin{itemize}
  \item \textsuperscript{41} Lazarus, \textit{supra} note 11, at 2445–85.
  \item \textsuperscript{42} Lazarus also saw challenges for criminal enforcement because of the aspirational qualities of environmental law (the degree to which Congress sets lofty, if arguably unattainable, goals such as the elimination of all discharges into waters of the United States by 1985) and the dynamic tendencies of environmental law (the changes in the law that accompany greater understanding of the harmful effects of pollution—and the ever-shifting political support for strong environmental protection). \textit{Id.} at 2424–28.
  \item \textsuperscript{43} \textit{Id.} at 2429–38.
  \item \textsuperscript{44} Similar concerns could be raised about prosecution for other regulatory crimes, such as antitrust, securities, and tax violations, which also involve complex regulatory schemes and highly technical issues of proof.
\end{itemize}
requirements, the potential scope of criminal liability under RCRA (and other environmental statutes) is extensive.

From a practical perspective, however, whether the complexity of environmental law raises problems for criminal enforcement depends upon whether prosecutors pursue cases that involve issues of regulatory uncertainty. Congress often uses broad statutory language to address white-collar crimes, because the sophistication of the regulated businesses makes it difficult, if not impossible, to anticipate all the scenarios where criminal prosecution might be appropriate. The relevant question thus becomes whether there are sufficient legal and prudential safeguards in the environmental context to ensure that prosecutors do not abuse their discretion by pursuing criminal charges against defendants who run afoul of complex regulations, which reasonably could be subject to conflicting or uncertain interpretations. While there may be circumstances where overreaching has occurred, a number of safeguards exist.

First, due process concerns preclude criminal prosecution when the meaning of the law is unclear. "A criminal statute must be sufficiently definite to give notice of the required conduct to one who would avoid its penalties. . . ."46 Although fair notice requirements are more relaxed in the business context,47 statutory and regulatory requirements are "void for vagueness" if a reasonable person in the defendant's position would be unable to determine what conduct is forbidden by the law.48

Given the complexity of the environmental laws, it is not surprising that numerous void-for-vagueness challenges have been brought in environmental criminal prosecutions.49 The government has an inherent advantage in responding to these challenges because the regulated community is presumed to have a heightened understanding of the legal obligations governing its activities.50 In addition, at least some cases that involve regulatory complexity are resolved by plea agreement, so the vagueness of the underlying regulations is never litigated. Nonetheless, the fact that so few void-for-vagueness challenges have been successful may indicate that prosecutors focus on cases where the meaning of the underlying regulations is clear. At a minimum, the void-for-vagueness principle provides doctrinal protection against prosecution when the law is unsettled.

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47 Cf. United States v. Weitzenhoff, 35 F.3d 1275, 1289 (9th Cir. 1993) (lowering fair notice requirements for "conduct of a select group of persons having specialized knowledge" (quoting Precious Metals Assocs., Inc., v. Commodity Futures Trading Comm'n, 620 F.2d 900, 907 (1st Cir. 1980))).
49 See, e.g., United States v. Elias, 269 F.3d 1003, 1015 (9th Cir. 2001) (denying appellant's void-for-vagueness challenge).
50 See Weitzenhoff, 35 F.3d at 1289 (citations omitted).
Second, the rule of lenity reinforces the void-for-vagueness doctrine by requiring courts in criminal cases to resolve ambiguities about the meaning of the law in favor of the defendant. The rule of lenity "is rooted in the concern of the law for individual rights, and in the belief that fair warning should be accorded as to what conduct is criminal and punishable by deprivation of liberty or property." As an example, in United States v. Plaza Health Laboratories, the Second Circuit vacated convictions under the Clean Water Act, concluding that it was not clear that a human being could be a point source under the Act. The Second Circuit's decision is one of the few times a defendant has prevailed on rule of lenity grounds, which could demonstrate that courts do not give sufficient weight to lenity arguments. On the other hand, the fact that prosecutors usually prevail could be another indication that prosecutors exercise their discretion to avoid cases where the underlying regulations are ambiguous. At the very least, the rule of lenity provides further doctrinal protection against government overreaching.

Third, the burden of proof in criminal cases counsels the government to avoid prosecution where the meaning of the law is difficult to ascertain. The government must prove a criminal defendant's guilt beyond a reasonable doubt, which is difficult to accomplish where the underlying regulations and definitions are confusing or unclear. There are limits to this argument; criminal trials can involve complex areas of proof and extensive instructions of law from the court. But the government's ability to convince a unanimous jury beyond a reasonable doubt is compromised if a criminal prosecution focuses on unduly complex statutory and regulatory concepts. Prosecutors have limited resources and tend not to pursue cases that are unwinnable. It is not surprising, therefore, that environmental crime prosecutors generally have left to their civil counterparts the more controversial enforcement issues.

Due process protections and the exercise of prosecutorial discretion do not invalidate the concerns that were raised prospectively about whether environmental law and criminal law could be integrated effectively. From a theoretical perspective, reconciling the vagaries of environmental law with the due process demands of criminal law presents challenges. A fair consideration of those challenges, however, requires evaluating the complexity of environmental law alongside the doctrinal protections of the void-for-vagueness doctrine and the rule of lenity. If those protections are given meaning by the courts, and if they are honored in the exercise of prosecutorial discretion, criminal enforcement should

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52 3 F.3d 643, 649–50 (2d Cir. 1993). Judge Oakes argued in dissent that the point source requirement distinguishes controllable discharges from those that are not from a discrete source. Id. at 650–56 (Oakes, J., dissenting). There is nothing in the legislative history that suggests that a person cannot be a point source; indeed, all point source discharges arguably involve humans in some way.
not involve issues of regulatory uncertainty. In addition, criminal enforcement under the environmental laws can be reserved for types of violations that are less likely to raise integration concerns. This issue will be discussed further in Part IV.

III. MENTAL STATE REQUIREMENTS FOR ENVIRONMENTAL CRIME AND THE RESPONSIBLE CORPORATE OFFICER DOCTRINE

When Congress amended the environmental laws in the 1980s to make environmental crimes felonies, it also changed the mental state requirements for Clean Water Act prosecutions from “willfully or negligently” for misdemeanors to “knowingly” for felonies and “negligently” for misdemeanors. By eliminating the willfulness requirement and substituting a knowledge requirement, Congress provided consistency among the criminal provisions of the major environmental statutes and aligned the mental state requirements for environmental crimes with the requirements for many other federal criminal statutes.

Numerous commentators nonetheless expressed concern that Congress had reduced the mental state requirements for environmental crime when it adopted the knowingly standard. They predicted that felony prosecutions would result in situations where a defendant had no idea that she was doing anything wrong, which would be unfair in an area of regulatory complexity. Compounding the matter, the Clean Air Act and Clean Water Act include “responsible corporate officers” in the definition of a “person” covered by the criminal provisions of the statutes. Some analysts suggested that the responsible corporate officer doctrine would allow corporate officials to be prosecuted for acts that they did not know were occurring. This Part evaluates each of these arguments.

A. The “Knowingly” Mental State Requirement

The number of environmental criminal cases surged after Congress amended the environmental laws during the 1980s and increased even more dramatically after Congress passed the Pollution Prevention Act of 1990, which required the

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56 See Gaynor, supra note 7, at 11–12 (arguing that the mental state requirements for environmental crimes are lower than for other crimes); Shafer, supra note 18, at 538 (“RCRA’s minimal knowledge requirements impose near strict liability on corporate officers.”); Wolf, supra note 39, at 12 (“[c]hanging from specific intent to general intent is a significant reduction of the intent requirement.”).
58 Onsdorff & Mesnard, supra note 9, at 10104.
EPA to hire 200 criminal investigators.\(^{59}\) In the ensuing years, many criminal prosecutions involved litigation over the knowledge requirements for environmental crime. Courts frequently described the question as determining how far down the sentence the word “knowingly” traveled. For example, RCRA imposes criminal penalties on any person who “knowingly treats, stores, or disposes of any hazardous waste identified or listed under this subchapter—(A) without a permit under this subchapter...”\(^{60}\) As a matter of statutory construction, reviewing courts framed the question as one of syntax: which words did “knowingly” modify?\(^{61}\) Similar questions were raised in cases prosecuted under the Clean Air Act and the Clean Water Act.\(^{62}\)

Although characterized as an issue of statutory construction, the question in cases addressing the mental state requirements for environmental crime was whether the government was required to prove knowledge of the law.\(^{63}\) Prosecutors argued that knowledge of the facts was sufficient. They cited the time-honored maxim that “ignorance of the law is no defense” and argued that the principle carried greater weight where deleterious or hazardous substances are involved.\(^{64}\) Defense counsel countered that the knowingly requirement would be meaningless if it did not also include knowledge of the governing legal requirements, particularly in cases where defendants were charged with knowing violation of permit limits.\(^{65}\) They asserted that a defendant who had a permit authorizing discharges could not be criminally prosecuted for permit violations unless she knew the permit was violated.\(^{66}\)

The courts overwhelmingly sided with the government. In RCRA cases, the government only was required to show that a defendant knew the material that was transported, treated, stored, or disposed of improperly had a substantial “potential to be harmful to others or the environment.”\(^{67}\) The government was not required to prove that the defendant knew the material met the legal definition of hazardous waste.\(^{68}\) In Clean Air Act cases involving asbestos renovation and demolition, the

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\(^{61}\) See, e.g., United States v. Hoflin, 880 F.2d 1033, 1036–37 (9th Cir. 1989).


\(^{63}\) See, e.g., Buckley, 934 F.2d at 88 (“[T]he statute requires knowledge only of the emissions themselves, not knowledge of the statute . . .”).


\(^{65}\) See, e.g., United States v. Sinskey, 119 F.3d 712, 715 (8th Cir. 1997) (rejecting argument that “the government must prove that [appellant] knew that his conduct violated either the [Clean Water Act] or the [National Pollution Discharge Elimination System] permit”).

\(^{66}\) See id. at 715–16.

\(^{67}\) United States v. Laughlin, 10 F.3d 961, 965, 967 (2d Cir. 1993).

\(^{68}\) Id. at 965.
government was required to show that the defendant knew that asbestos was being removed and the methods used to remove it; the government was not required to show that the defendant knew the legal requirements that governed asbestos removal.\(^{69}\) Similarly, in Clean Water Act cases, the government was required to prove that the defendant knew what was being discharged, although knowledge of the law was not required.\(^{70}\)

The unifying theme of the appellate court decisions considering mental state requirements for environmental crime was that the government must prove knowledge of the facts but not knowledge of the law.\(^{71}\) The Supreme Court subsequently made clear in a firearms case that the appellate courts were construing knowledge consistent with the general approach of the criminal law.\(^{72}\) The Court explained that the term "knowingly" does not involve a culpable state of mind or knowledge of the law because individuals are presumed to know the legal requirements that govern their actions.\(^{73}\) The term "knowingly" "merely requires proof of knowledge of the facts that constitute the offense" (in contrast to willfulness, which requires "that the defendant acted with an evil meaning mind, that is, that he acted with knowledge that his conduct was unlawful").\(^{74}\)

Other federal regulatory crimes, including food and drug, antitrust, and securities violations, also impose criminal liability using a knowingly standard.\(^{75}\) Still, there are legitimate questions that can be raised about the appropriateness of a mental state standard for environmental crime that does not require knowledge of regulatory requirements. If much of environmental law is technical and complex, a defendant might reasonably but erroneously believe her conduct was lawful. Such misunderstandings might be particularly likely with new regulatory programs or

\(^{69}\) See United States v. Buckley, 934 F.2d 84, 88 (6th Cir. 1991).

\(^{70}\) See United States v. Cooper, 482 F.3d 658, 665–68 (4th Cir. 2007); United States v. Ahmad, 101 F.3d 386, 390–91 (5th Cir. 1996).

\(^{71}\) The one exception was United States v. Johnson & Towers, 741 F.2d 662, 669 (3d Cir. 1984), where the Third Circuit required knowledge of the permit requirement. No subsequent court has followed Johnson & Towers, however, and given the contrary authority that has emerged in the twenty-five years since Johnson & Towers was decided, it is not clear whether the Third Circuit would impose the same knowledge requirements if it considered the issue again today.


\(^{73}\) Id. at 192–93.

\(^{74}\) Id. at 193. Bryan may be in tension with the Court's ruling in United States v. Liparota, 471 U.S. 419, 425 (1985), where the Court construed "knowingly" in a food stamp case to require knowledge of unlawfulness. In Bryan, the Court distinguished and perhaps limited Liparota, explaining that knowingly requires only knowledge of the facts "unless the text of the statute dictates a different result." Bryan, 524 U.S. at 193.

when the government changes its interpretation of the governing law. Yet mistake of law is not a defense for environmental crime.

As discussed above, however, the void-for-vagueness doctrine should protect defendants from criminal prosecution when the meeting of the law is unclear, and the rule of lenity requires courts to construe ambiguous statutory and regulatory terms in the defendant’s favor. In addition, the government generally avoids criminal prosecution when the meaning of statutory and regulatory terms is not well established. As a result, the likelihood of an honest mistake of law arising in the context of a criminal prosecution may be more theoretical than practical.

Nor is it true that the knowingly mental state requirement is a reduced mens rea tantamount to strict liability. Strict liability offenses allow a defendant to be held liable in the absence of any knowledge of the facts that constitute a violation. Under the environmental laws, a jury can find a defendant guilty only if the defendant has knowledge of all nonjurisdictional facts. For example; a defendant who discharged gasoline into a sewer system but thought he was discharging water would not have knowledge of the fact that he had discharged a material that met the legal definition of a “pollutant.”

The more difficult question is what knowledge of nonjurisdictional facts means in the environmental context. Model jury instructions state that “an act is done knowingly if the defendant is aware of the act and does not act through ignorance, mistake or accident.” While the instruction requires awareness of the act, it does not explain which facts a defendant must know. In some contexts, appellate courts have provided answers. For example, in a RCRA prosecution for disposal without a permit, a defendant must know that the material is waste and that it has the substantial potential to be harmful to others and the environment. It is less clear, however, that appellate courts have required knowledge of all

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76 Of particular concern would be situations where the government issues guidance documents construing regulatory requirements that affect the government’s regulatory and litigation positions, but do not have the force of law and therefore are not published based on notice and comment.

77 See, e.g., United States v. Sinskey, 119 F.3d 712, 716–17 (8th Cir. 1997); United States v. Ahmad, 101 F.3d 386, 391 (5th Cir. 1996).


80 See Ahmad, 101 F.3d at 391. The exception to the rule articulated in Ahmad occurs when the defendant is willfully blind to the relevant facts, meaning she took affirmative steps to shield herself from facts that otherwise would have been obvious. See, e.g., United States v. Hopkins, 53 F.3d 533, 541–42 (2d Cir. 1995) (defendant could not escape liability if he “deliberately and consciously avoided” knowledge of the violation).

81 NINTH CIRCUIT MODEL CRIMINAL JURY INSTRUCTIONS § 5.6 (2003).

82 United States v. Laughlin, 10 F.3d, 961, 967 (2d Cir. 1993).
nonjurisdictional facts. For example, in the same RCRA disposal case, the government would not be required to prove that the defendant knew she did not have a permit, even though the absence of a permit is an element of the offense.

In still other contexts, the courts have struggled with the distinction between knowledge of the law and knowledge of the facts. The best example is Clean Water Act permit violation cases, where a defendant must know a discharge occurred and presumably must know the facts that made the discharge a permit violation (i.e., elevated levels of a pollutant or improper treatment). Absent that additional knowledge, there would be no way to distinguish the knowledge of a defendant who discharged in compliance with a permit from the knowledge of a defendant who discharged in violation of a permit. Appellate courts have provided little guidance about what those additional facts might be, other than to explain that a defendant is not required to know that the discharge violated the permit.

In the years ahead, as more environmental cases reach the Supreme Court, there may be further attention given to the meaning of the knowledge requirements for environmental crime. While the legal framework is well settled in the appellate courts, the Supreme Court has been willing to set aside longstanding understandings of statutory terms in the environmental context. Still, Congress appears to have made the right choice by requiring knowledge rather than willfulness. Corporations and individuals who are subject to the environmental laws should be presumed to know their legal obligations. To hold otherwise might create an incentive for companies to be ignorant of the law, which would undermine environmental protection efforts. By requiring knowledge of the facts, Congress properly imposed on prosecutors the burden of proving that defendants knew about the conduct involved, while placing the burden on the regulated community to conform its conduct to the environmental laws.

B. The Responsible Corporate Officer Doctrine

Congress included responsible corporate officers in the definition of “person” under the Clean Water Act and the Clean Air Act. The responsible corporate

83 United States v. Hoflin, 880 F.2d 1033, 1037–39 (9th Cir. 1989).
84 United States v. Weitzenhoff, 35 F.3d 1275, 1286 (9th Cir. 1993); Hopkins, 53 F.3d at 541; cf. United States v. Sinskey, 119 F.3d 712, 715–16 (8th Cir. 1997).
86 33 U.S.C. § 1319(c)(6) (2006); 42 U.S.C. § 7413(c)(6) (2006). Significantly, RCRA does not include responsible corporate officers in its definition of person, which raises the question of whether the doctrine would apply in RCRA cases. Because Congress did not reference responsible corporate officers in RCRA, it would be reasonable to
officer doctrine originated in two Supreme Court cases involving violations of the food and drug laws, United States v. Dotterweich\(^\text{87}\) and United States v. Park.\(^\text{88}\) In Dotterweich, the Court upheld a strict liability misdemeanor conviction of a corporate official “standing in responsible relation to a public danger.”\(^\text{89}\) The Court recognized there might be circumstances where injustice could result from a strict liability prosecution but declined to limit the reach of its holding, relying instead on “the good sense of prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries ...”\(^\text{90}\) In Park, the Court further extrapolated its holding in Dotterweich, explaining it would be appropriate to hold “criminally accountable the persons whose failure to exercise the authority and supervisory responsibility reposed in them by the business organization resulted in the violation” and that the law “imposes not only a positive duty to seek out and remedy violations when they occur but also, and primarily, a duty to implement measures that will insure that violations will not occur.”\(^\text{91}\)

The inclusion of the responsible corporate officer doctrine in the Clean Air Act and Clean Water Act has prompted concern that individuals could commit felony violations of the environmental laws without knowledge of the underlying facts.\(^\text{92}\) Under this argument, a corporate official could be convicted of a felony and sentenced to a multiyear jail sentence based on status alone (e.g., a responsible relation to the violation). Nor does reliance on the good judgment of prosecutors (and judges and juries) provide much comfort to critics of the doctrine. Criminal prosecution can be personally and professionally devastating, even if the result is exoneration.

The responsible corporate officer doctrine expands the definition of persons who can be criminally prosecuted; it holds that corporate officials, who stand in a responsible relationship to a violation, can be prosecuted for their failure to prevent the violation.\(^\text{93}\) The doctrine imposes a duty to act on responsible corporate

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\(^{87}\) 320 U.S. 277, 281–84 (1943).


\(^{89}\) Dotterweich, 320 U.S. at 281.

\(^{90}\) Id. at 285.

\(^{91}\) Park, 421 U.S. at 671–72.

\(^{92}\) See supra note 8 and accompanying text; see also Charles J. Babbitt et al., Discretion and the Criminalization of Environmental Law, 15 DUKE ENVTL. L & POL’Y. F. 1, 8–9 (2004) (asserting that corporate officers may be held criminally liable on the basis of their position in the company even though they have no actual knowledge of the conduct); David C. Fortney, Thinking Outside the “Black Box”: Tailored Enforcement in Environmental Criminal Law, 81 TEX. L. REV. 1609, 1624–25 (2003) (arguing that, given the realities of corporate decision making and knowledge, “we should hesitate before applying strict liability criminal sanctions to corporate officers for the malfeasance of their employees”).

\(^{93}\) See, e.g., United States v. Iverson, 162 F.3d 1015, 1022, 1026 (9th Cir. 1998).
officials, thereby eliminating the direct act requirement and creating liability for a failure to act.⁹⁴

Significantly, however, the responsible corporate officer doctrine does not dispense with the underlying mental state requirements. The felony provisions of the environmental laws require that the defendant act knowingly.⁹⁵ As a result, the holdings of Dotterweich and Park, which involved strict liability offenses, must be adapted to reflect the higher mental state for environmental crimes, which require proof of knowledge. For those violations, a responsible corporate officer can only be found guilty if she (1) knows the conduct is occurring, (2) has the authority to prevent the conduct from occurring, and (3) fails to prevent the conduct.⁹⁶ Except in a case of willful blindness,⁹⁷ even a responsible corporate officer cannot be found liable for her failure if she lacks knowledge of the facts.

As noted in section A of this Part, there are challenges inherent in determining what facts a defendant must know in a prosecution for environmental crime. Those questions would carry over into a prosecution based on the responsible corporate officer doctrine, since the knowledge requirements would be the same. As a result, to prove that a responsible corporate officer “knows the conduct is occurring,” the government must show that she knows all nonjurisdictional facts. Absent that knowledge, a prosecution under the responsible corporate officer doctrine would expand criminal liability unfairly, just as it would in a case that did not involve use of the doctrine.

Nonetheless, critics of the responsible corporate officer doctrine miss the mark when they argue that the doctrine allows conviction based on status alone, without proof of knowledge. They attack a strict liability straw man from the statutes construed in Dotterweich and Park and erroneously conclude that Congress eliminated the knowingly requirement for environmental crime. When the responsible officer doctrine is properly understood as imposing a duty to act,⁹⁸ it is clear that corporate officials cannot be prosecuted based on status alone. Instead, the responsible corporate officer doctrine serves the broader goals of environmental protection and deterrence of violations by ensuring that corporate officials with authority over environmental compliance cannot ignore violations they know are occurring and have the ability to prevent.

⁹⁴ See, e.g., id. at 1026.
⁹⁵ See supra notes 23–25 and accompanying text.
⁹⁶ Iverson, 162 F.3d at 1022–26.
⁹⁷ See United States v. Hopkins, 53 F.3d 533, 541–42 (2d Cir. 1995) (holding defendant could not escape liability if he “deliberately and consciously avoided” knowledge of the violation).
IV. PROSECUTORIAL DISCRETION AND WHAT MAKES AN ENVIRONMENTAL CASE CRIMINAL

A common denominator of the concerns raised about criminal enforcement under the environmental laws is that prosecutors have too much discretion to determine which violations are criminal. The breadth of the environmental laws and the expansive language of their criminal provisions make it possible for a wide range of conduct to be criminalized. The knowingly standard allows more violations to be charged than the willfulness standard, which further expands prosecutorial discretion. As a result, commentators have suggested that Congress should have defined better what is an environmental crime, rather than delegating "line-drawing" authority to prosecutors in the executive branch.99 This Part considers the role of prosecutorial discretion in the environmental crimes program and identifies the types of violations that may warrant criminal enforcement.

A. Prosecutorial Discretion and Environmental Crime

The environmental laws make only limited distinctions between what conduct gives rise to criminal and civil liability. While some statutory provisions apply only to civil and administrative cases,100 the same conduct theoretically could give rise to criminal, civil, or administrative enforcement. Stated differently, the act requirement is the same for criminal, civil, and administrative cases; the primary distinguishing feature of criminal enforcement is the mental state requirement.

It is not unusual that mental state requirements provide the primary distinction between criminal and civil liability, especially for regulatory violations.101 Indeed, mental state is an essential element of all crimes (except strict liability offenses): a crime occurs when a prohibited act (actus reus) is committed with the requisite mental state (mens rea). Because so much conduct is covered by the environmental laws, however, and the government is not required to prove knowledge of the law, prosecutors have broad discretion to determine what is criminal. Even when knowledge of the facts is present, the government can elect between criminal, civil, and administrative remedies. While Congress may have intended to provide the government a range of enforcement options, similar violations could be treated differently depending upon who investigates the matter and who decides how the

99 Lazarus, supra note 6, at 883–84. See also Susan F. Mandiberg, Fault Lines in the Clean Water Act: Criminal Enforcement, Continuing Violations, and Mental State, 33 ENVTL. L. 173, 174 (2003) (characterizing the criminal provisions of environmental law as grafted onto civil and administrative schemes almost as an afterthought).
100 See, e.g., 42 U.S.C. § 6927(a) (2006) (discussing RCRA’s split sample requirement); id. § 6928(a)(2) (requiring the EPA to provide advance notice to state authorities before bringing an enforcement action in a state that is authorized to conduct a hazardous waste program).
101 See supra notes 12–13 and accompanying text.
violation should be addressed. Moreover, with broad discretion comes the risk that criminal prosecution will occur in circumstances where criminal enforcement is not appropriate.

First, as discussed in Part II, the underlying regulations may be too new or too complicated for criminal enforcement. While these concerns are addressed in part by the void-for-vagueness doctrine and the rule of lenity, only prosecutorial discretion precludes the government from bringing criminal charges in the more controversial areas of environmental law. Second, knowing endangerment is the only pollution crime frequently charged by the government that makes the seriousness of the violation an element of the offense. Outside of the knowing endangerment context, de minimus or highly technical violations could be criminally prosecuted. Third, only the Clean Air Act limits the definition of “person” covered by the criminal provisions of the environmental laws. As a result, under other environmental statutes, low-level employees could be prosecuted, even if they lacked the decision-making autonomy normally associated with criminal liability.

Each of the scenarios described above raises potential fairness issues and, at least conceptually, risks diminishing both the significance and moral opprobrium of the criminal sanction. If charges are brought for conduct that does not warrant criminal prosecution or against individuals who lack sufficient culpability, the legitimacy of the environmental laws and the deterrent purposes of the criminal law would be undermined.

On the other hand, while prosecutorial discretion is broad under the environmental laws, environmental prosecutors may not have more discretion than other prosecutors. Investigative and prosecutorial discretion are central features

102 In the early years of the environmental crimes program, practitioners claimed whether a case was criminal or civil depended largely on where within the EPA the case began. If the case developed as a civil case, it remained a civil case (regardless of whether the defendant acted knowingly); if the case began as a criminal case, it was eventually referred for criminal prosecution (regardless of whether it involved the type of egregious conduct that warranted criminal enforcement). See Starr, supra note 6, at 913–14. Since that time, the EPA has developed case screening protocols to ensure the agency uses consistent criteria in determining what enforcement response is appropriate. Clearly, however, whether a case is criminal or civil should not depend upon the bureaucratic vagaries of whether the matter originates with a criminal investigator or civil regulator.

103 The Clean Water Act authorizes criminal prosecution for knowing discharges of oil or hazardous substances “in such quantities as may be harmful as determined [by regulations under the Act],” 33 U.S.C. § 1321(b)(3) (2006), but it is not a frequently used charge in criminal cases.

104 42 U.S.C. § 7413(h) (2006). Except in the case of knowing and willful violations, the Clean Air Act excludes individuals who are not senior management personnel and corporate officers and employees who are carrying out normal duties and acting under orders from the employer. Id.

105 Brickey, supra note 10, at 127 (“[Critics] suggest surprising naiveté about the degree of precision and certainty found in federal criminal law and the role that discretion
of all criminal enforcement programs. Congress drafts criminal provisions in broad
terms to ensure that cases warranting prosecution can be addressed, while relying
on prosecutorial discretion to decline marginal cases. It could be argued that
Congress relies too much on prosecutorial discretion, but it would be difficult for
Congress to craft statutory requirements that would replace prosecutorial
discretion. Whether a violation is egregious enough to warrant criminal
prosecution involves factors that may be present to different degrees in different
cases. Such factors, like principles of fairness, may not be reduced easily to
statutory elements.

Nor is prosecutorial discretion in the environmental context unfettered. The
EPA requires its criminal investigators to focus on matters involving significant
environmental harm and culpable conduct, with culpability defined to include
repetitive violations, deliberate misconduct, and acts of concealment or falsification. Likewise, Justice Department prosecutors must follow the
Department’s Principles of Federal Prosecution, which require prosecutors to
to consider the nature and seriousness of the offense, the deterrent value of the
prosecution, and the availability of non-criminal alternatives to prosecution.

Although the EPA and Justice Department policy documents do not create legal
rights for defendants or impose legal duties on the government, they provide
institutional constraints on the exercise of prosecutorial discretion.

Prosecutors of environmental crime also must exercise their discretion
mindful of how judges will respond to the charges, a calculation that may result in
greater caution because environmental crimes are not prosecuted as often as
traditional crimes. Federal district court judges must accept guilty pleas and
preside over trials. While judges have no authority over charging decisions, their
legal and evidentiary rulings can affect the government’s ability to obtain a
conviction. Moreover, judges have authority under Rule 29 of the Federal Rules of
Criminal Procedure to enter judgment of acquittal if they believe the government
has not sustained its burden of proof, and to award attorney’s fees to the defendant
if they find that the prosecution is frivolous, vexatious, or in bad faith. In these
ways, judges influence the exercise of prosecutorial discretion in environmental

necessarily plays in its enforcement.”); see also David A. Barker, Note, Environmental
Crimes, Prosecutorial Discretion, and the Civil/Criminal Line, 88 VA. L. REV. 1387, 1421
(2002) (stating broad prosecutorial discretion is “quite typical of criminal law” and may be
less objectionable in the context of environmental crimes, “where most defendants will be
quite capably represented”).

106 See Brickey, supra note 10, at 129–30.
107 Memorandum from Earl E. Devaney, Director, Office of Criminal Enforcement,
U.S. Envlt. Prot. Agency, to All EPA Employees Working in or in Support of the Criminal
cases, much as they do for other federal crimes, and provide at least some protection to defendants in the event that prosecutors abuse their discretion.

Finally, juries influence how prosecutors exercise their discretion in environmental cases. As noted in Part II, prosecutors have limited resources and avoid cases they will lose. The Principles of Federal Prosecution state that "as a matter of fundamental fairness and in the interest of the efficient administration of justice, no prosecution should be initiated against any person unless the government believes that the person probably will be found guilty by an unbiased trier of fact." Here again, prosecutors are likely to be cautious because the jury appeal of environmental cases may depend upon factors other than legal sufficiency. Even in cases where the government meets its burden of proof, jury nullification may occur if the conduct is not egregious enough.

In sum, although there always is a danger of prosecutorial abuse when discretion is broad, and those risks are present in the environmental context, reliance on prosecutorial discretion is a central feature of our criminal justice system. We depend upon the fair exercise of prosecutorial discretion to filter out cases that, while technically meeting the statutory elements for prosecution, do not warrant criminal sanctions. Prosecutorial discretion in the environmental context is no different. As the Supreme Court has explained, "[i]n such matters the good sense of prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries must be trusted." 111

B. What Makes an Environmental Case Criminal?

Because Congress gave broad discretion to prosecutors in determining what violations should be criminally enforced, the theoretical issue becomes whether specific discretionary factors make cases appropriate for criminal enforcement and thus answer the question about what makes an environmental case criminal. The proper exercise of prosecutorial discretion involves more than a rote elements analysis. For cases to have jury appeal, it should be possible to determine what makes a particular matter a criminal case. Moreover, from a systemic perspective, identifying the discretionary factors that make environmental violations criminal may mitigate concerns about the expansive statutory definition of environmental crime. This Section describes four categories of environmental violations that may be appropriate for criminal sanctions and therefore should be the focus of the government's criminal enforcement efforts. 112

110 U.S. ATTORNEYS' MANUAL, supra note 108, at § 9-27.220B.
112 The categories identified in this Part focus on evidentiary factors that should affect the exercise of prosecutorial discretion. At least one other scholar has attempted to classify by type of violation. See Kathleen F. Brickey, Environmental Crime at the Crossroads: The Intersection of Environmental and Criminal Law Theory, 71 TUL. L. REV 487, 514–25 (1997) (classifying environmental crimes as either administrative or substantive violations).
1. Cases Involving Significant Harm or Risk of Harm to the Environment or Public Health

The first category of cases that may be appropriate for criminal enforcement is violations involving significant harm or risk of harm to the environment or public health. Congress included knowing endangerment provisions in RCRA, the Clean Water Act, and the Clean Air Act, thereby acknowledging the significance of cases involving harm or risk of harm to public health.\textsuperscript{113} As a matter of prosecutorial discretion, the government considers criminal prosecution in most cases that involve significant harm or risk of harm to the environment.\textsuperscript{114}

The classic example of a case that was criminal because of the gravity of the harm involved was the prosecution of the Exxon Valdez oil spill.\textsuperscript{115} No one would argue that Exxon Shipping Company intended to release hundreds of thousands of gallons of crude oil into Prince William Sound. The United States nonetheless prosecuted Exxon because there was evidence that the company was negligent in its crew supervision and the resulting harm was so substantial.\textsuperscript{116}

From a public health standpoint, there are even more examples of cases that were criminally prosecuted because of the deaths and injuries that occurred. The United States recently prosecuted British Petroleum for Clean Air Act violations at a Texas refinery that resulted in fifteen deaths.\textsuperscript{117} W.R. Grace Corp. was prosecuted, although eventually acquitted, for Clean Air Act knowing endangerment after hundreds of people died of asbestos-related diseases in Libby, Montana.\textsuperscript{118} Perhaps not surprisingly, the longest jail sentences for environmental crime have occurred in cases where there were significant injuries or public health risks. In United States v. Elias, a federal district court judge sentenced the

\textsuperscript{114} Given the significance of environmental harm, it could be argued that Congress should make harm an element that the government must prove. The problem with requiring proof of harm, apart from the fact that harm is just one of several discretionary factors that may make cases criminal, is that it would raise difficult and potentially insurmountable evidentiary issues. Environmental harm often is cumulative and a matter of degree. Requiring proof of harm for the discharge of pollutants measured in parts per million would reduce criminal trials to scientific debates about the ecological effects of pollution, which, although a worthy topic in other contexts, should not determine guilt or innocence.
\textsuperscript{115} See William H. Rodgers et al., The Exxon Valdez Reopener: Natural Resources Damage Settlements and Roads Not Taken, 22 ALASKA L. REV. 135, 150 (2005) ("The Exxon Shipping Company and the Exxon Corporation faced five criminal charges as a result of the spill.").
\textsuperscript{118} United States v. W.R. Grace, 504 F.3d 745, 749–51 (9th Cir. 2007) (interlocutory appeal of pre-trial orders).
defendant to seventeen years in prison for sending his workers into a tank of cyanide waste, which left one of the employees severely and permanently brain-damaged.\textsuperscript{119} In \textit{United States v. Salvagno}, the defendants were sentenced to twenty-five years and nineteen years in prison after conducting improper asbestos removal at hundreds of buildings in New York State.\textsuperscript{120}

Few dispute the appropriateness of criminal prosecution in cases that involve significant environmental and public health effects. The EPA devotes the first section of its memorandum regarding the exercise of investigative discretion to cases involving significant environmental harm.\textsuperscript{121} Even critics of criminal enforcement concede that cases involving significant harm or risk of harm may be appropriate for criminal prosecution.\textsuperscript{122} When a violation puts the environment or public health at risk, the goals of the environmental protection laws are undermined, and there are significant societal costs.

Ironically, cases involving significant harm or risk of harm may raise the greatest danger of prosecutorial overreaching. When an environmental catastrophe occurs or a violation puts lives at risk, there is a natural tendency to seek the most severe sanction possible.\textsuperscript{123} The government receives a more sympathetic hearing about any legal issues that arise, and convictions are easier to obtain and affirm on appeal. Yet, without sufficient evidence of wrongdoing, neither the desire for retribution nor the jury appeal of cases involving harm justifies criminal prosecution.

Investigators and prosecutors should be expected to look for more than simply the harm or risk involved when determining whether to pursue criminal charges. After all, with the exception of knowing endangerment,\textsuperscript{124} neither harm nor risk of harm is an element the government must prove. As a result, while cases involving harm or risk are appropriate to consider for possible criminal enforcement, the government should prosecute only when there is evidence that the violations charged caused the harm (and not simply that violations occurred that had minimal, if any, causal relationship to the harm). Likewise, the government should emphasize cases where the defendant was aware of the risks associated with the misconduct (or willfully blind to those facts). By limiting criminal prosecutions to violations that caused the harm and to defendants who knew or should have known

\begin{footnotes}
\item[119] 269 F.3d 1003, 1007–09 (9th Cir. 2001).
\item[120] \textit{See} \textit{United States v. Salvagno}, No. 06-4202-cr(L), 2009 WL 2634655, at *1 (2d Cir. Aug. 29, 2009) (sentencing Alexander Salvagno to 300 months imprisonment); \textit{United States v. Salvagno}, No. 06-4201-cr(L), 2009 WL 2634647, at *1 (2d Cir. Aug. 28, 2009) (sentencing Raul Salvagno to 235 months imprisonment).
\item[121] Memorandum from Earl Devaney, \textit{supra} note 107, at 4.
\item[122] \textit{See}, e.g., \textit{Coffee, supra} note 8, at 217 (identifying environmental crimes such as endangerment as “serious offenses that do not merit leniency”).
\item[123] \textit{See} \textit{Adler & Lord, supra} note 116, at 821–22 (arguing for higher penalties in cases like Exxon that cause substantial environmental harm).
\item[124] \textit{See} \textit{supra} note 5.
\end{footnotes}
about the risks involved, the government will avoid opportunistic prosecutions based solely on the desire for retribution.

2. Cases Involving Deceptive or Misleading Conduct

The second category of cases that may warrant criminal enforcement is violations involving deceptive or misleading conduct. RCRA, the Clean Water Act, and the Clean Air Act all include false-statement provisions and make it a crime to fail to submit required reports to the EPA and the states. The Clean Water Act, which depends upon honest self-reporting of permitted discharges, also criminalizes tampering or rendering inaccurate a Clean Water Act monitoring method. CERCLA contains one criminal provision: a failure to report crime.

Cases involving deceptive or misleading conduct also are charged under the general criminal provisions found in Title 18 of the United States Code. Title 18 includes conspiracy, fraud, false statements, concealment, obstruction of justice, and perjury. Prosecutors frequently include Title 18 charges, along with environmental charges, to highlight traditional badges of criminality. By emphasizing Title 18 charges, prosecutors emphasize the aspect of the violations that traditionally justifies criminal enforcement (false statements, concealment, obstruction of justice, fraud) and utilize charges that are most familiar (and therefore acceptable) to federal district court judges.

Classic examples of violations involving deceptive and misleading conduct are midnight dumping, hidden discharge pipes, tampering with required samples, and falsification of required reports. For example, in United States v. Sinskey, two individuals were convicted for conduct that included the repeated falsification of monthly reports required under the Clean Water Act, which did not disclose any permit violations even though the facility was discharging at levels greater than permit limits. The falsification occurred alongside efforts to manipulate the discharges and selective sampling to make it appear that the facility was meeting its permit limits, which the government charged as a separate violation (rendering inaccurate a Clean Water Act monitoring method).

More recently, environmental crimes prosecutors have charged conspiracies to defraud the United States and obstruction of justice when a pattern of deceptive conduct frustrated efforts of the EPA and the states to ensure compliance with the environmental laws. Perhaps the best example is the multi-district prosecution of McWane, Inc., for environmental and worker safety violations at five facilities.

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128 See 18 U.S.C. § 371 (2006) (conspiracy); id. § 1001 (false statements); id. § 1341 (fraud); id. §§ 1501–1520 (obstruction); id. § 1621 (perjury).
129 119 F.3d 712, 714 (8th Cir. 1997).
130 Id.
across the United States. All but one of the cases involved efforts to deceive government regulators (and the fifth involved a worker death).

Whether charged as violations of false statement provisions of the environmental laws, under Title 18, or as a pattern of misconduct, the theory of criminality remains the same in cases involving deceptive conduct. Fair and effective administration of the environmental laws, like other regulatory programs, cannot occur if the government does not have complete and accurate information about compliance from the regulated community. No factor is more decisive than lying in making a criminal case out of what might otherwise be a civil matter.

3. Cases Involving Facilities That Operate Outside the Regulatory System

The third category of cases where criminal prosecution may be appropriate involves facilities that operate completely outside the regulatory system. RCRA, the Clean Water Act, and the Clean Air Act (after the 1990 amendments) include permitting requirements. A facility that treats, stores, or disposes of hazardous waste must obtain a RCRA permit. A company that discharges waste into waters of the United States must obtain a Clean Water Act permit. A refinery that releases benzene must comply with the benzene NESHAPs under the Clean Air Act.

In myriad ways, the environmental laws impose regulatory obligations on facilities across America. To understand and meet regulatory requirements, companies must make a significant financial commitment to regulatory compliance. In addition, under many of the environmental statutes, the government's ability to provide adequate environmental protection depends upon its ability to identify all sources of pollution. For example, the government's ability to ensure that air quality standards are met depends upon accurate information about sources and quantities of pollution that affect air quality.

Companies that operate outside the regulatory system may be appropriate targets of criminal prosecution for three reasons. First, they are flouting their legal obligations and doing so in a system that depends upon regulated facilities to self-identify and seek appropriate permits. Second, their conduct undermines the goal of environmental protection by frustrating the government's ability to monitor and control all sources of pollution. Third, they would otherwise have a significant competitive advantage over companies that make the requisite (and costly) commitment to environmental compliance.

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131 See Uhlmann, supra note 16, at 196.
132 See id. at 196–97; David Barstow, Guilty Verdict in New Jersey Worker-Safety Trial, N.Y. TIMES, Apr. 27, 2006, at A22.
The argument for considering criminal enforcement against facilities that operate outside the regulatory system does not mean all such violations warrant criminal enforcement. The exercise of prosecutorial discretion, while always essential, may carry particular significance in this category because not every failure to participate in the regulatory system carries equal weight. Much as prosecutors have historically avoided criminal prosecution in more ambiguous areas of environmental law, they should ensure that the criminal sanction is reserved for cases where the failure to meet regulatory requirements has the potential to undermine environmental protection and does not involve technical requirements.\footnote{For this reason, the government generally has avoided criminal prosecution for generators who fail to obtain an EPA identification number, which is a criminal violation of 42 U.S.C. § 6928(d)(4). The notice requirements imposed on generators are the first link in the cradle-to-grave regulatory scheme created by RCRA, but criminal prosecution has focused on the illegal transportation, storage, and disposal of hazardous waste, which involves the greatest risk of harm to the environment and public health.}

4. Cases Involving Repetitive Violations

The fourth category of cases that may warrant criminal prosecution is repetitive violations. EPA and state regulators often begin enforcement efforts with a notice of violations or pursue other administrative remedies prior to seeking judicial relief (civil or criminal). Whether a preference for counseling is appropriate for violation of environmental and public health requirements might be disputed by some environmental groups. On the other hand, some business organizations might suggest that environmental regulators are too heavy handed about pursuing civil or criminal enforcement.

Without resolving the normative question about whether the government should emphasize compliance assurance or enforcement, it seems reasonable to suggest that repeated noncompliance may warrant enforcement.\footnote{A recent survey conducted by the \textit{New York Times} found that there were over 500,000 violations of the Clean Water Act at approximately 23,000 facilities between 2004 and 2007. Charles Duhigg, \textit{Clean Water Laws Are Neglected, at a Cost in Suffering}, N.Y. TIMES, Sept. 12, 2009, at A1. The \textit{New York Times}'s statistics do not distinguish among types of violations, and as a result likely overstate the degree to which there has been underenforcement of the Clean Water Act. In addition, there may be legitimate reasons for non-enforcement, including leveraging more far-reaching compliance agreements. \textit{See} Babbitt et al., supra note 92, at 45. Nonetheless, when violations persist despite the efforts of the regulatory agency to ensure compliance, repetitive violators may become appropriate targets for enforcement, including criminal prosecution. \textit{See also} Charles Duhigg, \textit{Millions in U.S. Drink Dirty Water, Records Show}, N.Y. TIMES, Dec. 8, 2009, at A1 (stating the EPA brought enforcement cases in only 6 percent of violations of the Safe Drinking Water Act in part because of reluctance to pursue cases against the municipalities and small towns that operate many public water systems).} If the
noncompliance undermines environmental protection or continues after civil enforcement action, criminal prosecution may be appropriate.

A classic example of a case involving repetitive violations was the prosecution of United States v. Williams. The defendant, who operated a drum manufacturing facility, received numerous notices of violation over a period of more than ten years from state and federal officials. Eventually, he had accumulated 30,000 drums in a residential neighborhood, several thousand of which were full or partially full. After a $1.5 million Superfund cleanup action, the United States prosecuted Williams criminally for illegal storage and disposal of hazardous waste, and he was convicted and sentenced to forty-six months imprisonment.

While there is little dispute about prosecution for repetitive violations in cases like Williams, it is worth noting that there are at least two areas where the prosecution of repetitive violations has resulted in discord: wetlands violations and chronic noncompliance by public entities. Wetlands prosecutions are among the most controversial criminal cases ever brought by the United States. Perhaps the contentiousness of the criminal wetlands prosecutions simply reflects disagreement about the appropriate scope of Clean Water Act jurisdiction and the impact of wetlands regulation on property rights. But there is no disputing the fact that criminal enforcement has occurred, in most instances, only after the unpermitted filling of wetlands continued after repeated warnings and civil violations. Likewise, there is disagreement even within the environmental enforcement community about whether public entities should be prosecuted criminally. The United States has brought civil enforcement actions against major cities including Atlanta, Detroit, and Los Angeles, but rarely has pursued criminal cases, even when civil lawsuits do not result in compliance.

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138 195 F.3d 823 (6th Cir. 1999).
140 Id.
141 195 F.3d at 825, 828.
142 See, e.g., United States v. Wilson, 133 F.3d 251 (4th Cir. 1997); United States v. Pozsgai, 999 F.2d 719 (3rd Cir. 1993); United States v. Ellen, 961 F.2d 462 (4th Cir. 1992); see also Kathleen F. Brickey, Wetlands Reform and the Criminal Enforcement Record: a Cautionary Tale, 76 WASH. U. L. Q. 71, 72–74 (1998) (describing the controversy that followed a successful wetlands prosecution).
144 A notable exception was the prosecution of United States v. PRASA, where the Puerto Rico Aqueduct and Sewer Authority pleaded guilty to multiple Clean Water Act violations at its wastewater treatment facilities and paid $10 million in criminal and civil fines, as well as injunctive relief. See Notice of Lodging of the Consent Decree Under the Clean Water Act, 71 Fed. Reg. 38660 (July 7, 2006).
Although wetlands cases present difficult jurisdictional issues, and prudential concerns may counsel against prosecution of public entities, repetitive violations generally warrant consideration for criminal enforcement. At some point, a facility that repeatedly violates its permit, even if those violations are disclosed, arguably is no more lawful than a facility that does not obtain a permit or lies about its permit compliance. Moreover, continued non-compliance raises the same issues for environmental protection and for fairness to law-abiding competitors that arise when a facility operates outside the regulatory system. In this area, the government would better deter violations if it prosecuted more aggressively.\footnote{The Obama administration has acknowledged the need for more vigorous enforcement against chronic violators of the Clean Water Act. See Charles Duhigg, \textit{E.P.A. Vows Better Effort on Water}, N.Y. TIMES, Oct. 16, 2009, at B1.}

V. CONCLUSION

While there was a dearth of environmental lawmaking over the past two decades, the environmental crimes program has matured and taken on increased significance in environmental enforcement efforts. Many of the concerns raised in the 1980s and 1990s about the role of criminal enforcement under the environmental laws have not materialized. To some extent, commentators may not have considered criminal law concepts like the void-for-vagueness doctrine and the rule of lenity. In addition, it was not possible to know prospectively how prosecutorial discretion would be exercised under the environmental laws.

Broad prosecutorial discretion always creates a risk that the government will charge violations that should not be criminal. That risk may be limited, however, if it is possible to identify the factors that prosecutors should consider in exercising their discretion. In the environmental context, prosecutors should focus on cases where there is significant harm or risk of harm, deceptive conduct, facilities that operate outside the regulatory system, and/or repetitive violations. By doing so, a well-integrated environmental crimes program is possible, even though criminal enforcement of environmental violations raises challenging theoretical and doctrinal issues.