COOL ANALYSIS VERSUS MORAL OUTRAGE IN THE DEVELOPMENT OF FEDERAL ENVIRONMENTAL CRIMINAL LAW

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I. Introduction

"Environmental criminal law" was, until recently, almost nonexistent. Even after the flood of stringent legislation enacted around the first Earth Day, April 22, 1970, only twenty-five criminal environmental cases were prosecuted during the entire decade of the 1970's. Since the middle part of the 1980's, however, Congress has been toughening federal environmental criminal laws. It has upgraded misdemeanor offenses to felonies, while also increasing fines recoverable across the board. At the same time, Congress has refused attempts to offset tougher sanctions with changes in the definitions of the substantive offenses that would make them harder to prove. Most notably, Congress has refused to change the state of mind that the government must show in order to convict. In addi-

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3. Id.

4. For succinct analyses of the state of mind requirements for environmental crimes, see Kevin A. Gaynor et al., Environmental Criminal Prosecutions: Simple Fixes for a Flawed System, 7 Toxics L. Rep. 994, 997-1002 (1999); Lisa A. Harg, Ignorance Is Not Bliss: Responsible Corporate Officers Conucted of Environmental Crimes and the Federal Sentencing Guidelines, 42 Duke L.J. 145 (1992). Gaynor et al. summarize the minimal level of culpability required for a case to become a criminal case. [A] citizen can be convicted for a felony under the typical environmental statute by displaying a level of mens rea that is a watered down version of general intent, which results in the government needing to show little to establish the "knowledge" element under these statutes. Further, some of these statutes require the government to show only negligence to establish criminal liability.

Id. at 997-98.

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tion, enforcement efforts have increased, as evidenced by a jump in federal prosecutions during this period.5

This growth in environmental criminal law has generated considerable commentary, raising questions as to whether the expanding environmental law violates norms of fairness to the targets of prosecution, whether the laws “overdeter,” and whether the Department of Justice and its U.S. Attorneys throughout the country are administering the new laws soundly. By and large, these debates have turned very little on anything distinctive about the environmental policy these criminal laws are intended to enforce. Instead, the exchanges typically concentrate on bringing general principles of criminal law, criminal procedure and the administration of criminal justice to bear on this growing white collar crime subspecialty.6

Such analyses certainly do have their place in the development of the field. However, instead of concentrating on the general criminal features of environmental criminal law in these brief remarks, I shall focus on its environmental features. Such a focus helps explain the recent stiffening of criminal environmental sanctions and suggests tougher enforcement is likely to continue, because these trends reflect the latest round in a dispositional war that has been ongoing in environmental policymaking for some time, but which has often been submerged.

For more than two decades, two fundamentally different approaches to environmental issues have emerged in disputes over the writing of environmental standards. One side typically has urged more lenient standards, or standards more accommodating to considerations of compliance costs, than the other. The quarrel over the stringency of standards has masked at times an equally fundamental difference in the two sides’ understandings of the role

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5. See infra notes 60-65 and accompanying text. For a splendid account of the development of federal criminal prosecutorial capacity in the environmental area, see Helen J. Brunner, Criminal Enforcement of Environmental Laws: A Retrospective View, 22 Envrn. L. 1318 (1992).

of those standards, which in turn affects their disposition toward sanctions. For one side of the debate, the standards send a signal about consequences, leaving to the individual discretion to decide whether he or she should comply; that is, sanctions are approached as a cost of doing business. For the other side, standards establish a moral obligation. The criminalization of environmental law is the latest battleground in this dispositional war in which, for reasons at least partially related to the historical development of environmental policy, the “cost of doing business” view is being overwhelmed by the “moral obligation” view.

II. COOL ANALYSIS AND MORAL OUTRAGE

Elsewhere, several colleagues and I have termed the two competing theories “cool analysis” and “moral outrage.” A brief summary will suffice to raise the necessary distinctions.

A. Cool Analysis

The cool analysis approach to environmental policy rests on two fundamental assumptions, one about individual motivations and actions, the other about environmental values. First, the predominant desire of most people is to improve their individual welfare, and they choose among options on that basis. Second, environmental values influence human desires through exactly and exclusively the same welfare-affecting mechanisms as does any other value. Thus, an interest in wilderness or endangered species preservation, respect for non-human life, and reverence for a “land ethic” are all indistinguishable from an interest in more leisure time, more food, or for a tie that properly accents a new suit. In this sense, environmental values are “ordinary.” One implication of these assumptions is that individuals will trade off environmental values against competing sources of value, according to which decision most improves a person’s welfare. If the aim of government is to enhance the welfare of its citizens, government should formulate

7. See Percival et al., supra note 1, at 68-69.
8. See id. at 69 (“[Environmental] questions are essentially questions of aggregating individual preferences.”).
9. See id. (“[C]ool analysis characterize [environmental] problems as strictly similar to all other problems of managing scarce resources.”).
environmental policies that achieve the most welfare-enhancing mix of environmental protection and competing goods.

Cost-benefit analysis provides one instrument for calibrating programs in an acceptable manner.\textsuperscript{10} Environmental issues, however, increasingly turn on questions of risk, and cool analysts have developed a widely adopted technique to incorporate assessments of risk into their welfare calculations. Cool analysts assume that people facing a choice involving risk will evaluate the actual impact of such choice on their welfare as equal to the expected impact of the choice on their welfare. In particular, people are satisfied with a "thin" description of risk that depicts risk in terms of just two variables—the probability that the harm will materialize and the magnitude of the injury that will be inflicted if harm does ensue.\textsuperscript{11}

In the struggle over the drafting of environmental statutes, cool analysts have lost numerous battles. From a cool perspective, the results are statutes that are unrealistic and even irrational, as in the Clean Water Act’s objective of “zero discharges” of wastes into water,\textsuperscript{12} the Resource Conservation and Recovery Act’s (“RCRA”) statutory ban on land-based disposal of many wastes,\textsuperscript{13} or the Clean Air Act’s requirement that hazardous air pollutant (“HAP”) emissions be reduced to a level requisite to “protect public health” with “an ample margin of safety.”\textsuperscript{14}

\textsuperscript{10} See id. ("The tradition of cool analysis is represented by welfare economics and cost-benefit analysis.").

\textsuperscript{11} See, e.g., Donald T. Hornein, Reclaiming Environmental Law: A Normative Critique of Comparative Risk Analysis, 92 Colum. L. Rev. 562, 585 (1992). Hornein describes a “hard version” of proponents of comparative risk analysis, resembling the “cool analysis” position, as involving three components: first, that sound environmental policymaking is mostly an analytic, rather than a political, enterprise; second, that environmental risk, measured in terms of expected losses (for example, expected deaths and injuries), is largely the best way for the policy analyst to conceptualize environmental problems; and, third, that different risks, once reduced to a common metric, are sufficiently fungible as to be compared, traded off, or otherwise aggregated by analysts wishing to produce the best environmental policy.

\textsuperscript{12} 33 U.S.C. § 1251 (1988) (declaring a “national goal that the discharge of pollutants into the navigable waters be eliminated by 1985”).


Cool analysis sees two deep flaws in such provisions. First, given that solving all environmental problems at once is much too expensive, these laws fail to prioritize problems according to the best available appraisals of which hazards pose the greatest risk. Second, as in the examples enumerated above, these provisions frequently fail to set standards properly because they fail to weigh environmental costs against economic, social, and other benefits on a case-by-case basis.

In trying to explain the source of these flaws, cool analysts frequently conclude that environmental statute-writing is driven by emotional, ill-informed, and irrational public opinion. Disdainful of public opinion, they argue that "the public is not qualified to participate in decisions about the risks they will have to endure because the public pursues an informal, probably messy 'logic' that the experts do not share."\textsuperscript{15} They look to official studies by the Environmental Protection Agency of its own agenda and priorities for confirmation that "during EPA's first 20 years it chose, or was forced, to work on problems the public deemed important; not necessarily addressing those issues posing the greatest risk to public health."\textsuperscript{16} Reversing these mistakes will necessitate "[e]ducat[ing] the public on the need for a risk-based rather than an emotion-based priority scheme."\textsuperscript{17}

B. Moral Outrage

Those who approach environmental policy from the vantage point of moral outrage vigorously deny that theirs is an irrational approach to environmental policymaking, or that they or other citizens are incompetent and unqualified to determine national policy. Instead, moral outrage builds on fundamental premises which, although undeniably opposed to those of cool analysis, also form a coherent and plausible set.

\textsuperscript{16} Dennis J. Paustenbach, Jousting with Environmental Windmills, 13 Risk Analysis 13, 13 (1993) (referring to EPA's self-analysis, U.S. ENVTL PROTECTION AGENCY, REDUCING RISKS: SETTING PRIORITIES AND STRATEGIES FOR ENVIRONMENTAL PROTECTION (1990)).
\textsuperscript{17} Id. at 14.
First, while people are concerned with their own welfare, people also are capable of and do make commitments to values independently of their effect on personal welfare. For example, people value democracy, family, a society free of slavery and racial or sexual oppression, and God and religion, and sometimes will make choices that protect those values even at the expense of individual welfare—although the relationships between these values and individual welfare frequently are constructed so that these choices enhance welfare by virtue of their enhancing self-esteem or a sense of personal integrity.

Second, environmental values are among the "special" values that attract desires to protect them for reasons in addition to their welfare-enhancing features. In particular, these special values (which include the values of individual autonomy and choice that are furthered by market economies) ought to be assessed in advance of the cost-benefit trade-offs that may occur in the market or in the government's efforts to substitute for market transactions. ¹⁸

With respect to evaluating the choices about health and safety risks of the kind that often are implicated by environmental disputes, this perspective employs a "thick" description of risk ¹⁹ in which the magnitude of possible harm and the probability of its occurring are only two factors in appraising the choices. Risk appraisal for the morally outraged is also influenced by other aspects of the risk, including ²⁰ (1) whether the risk is voluntary or involuntary; (2) whether its potential effects are evenly or unevenly shared; (3) whether its actual effects are evenly or unevenly shared; (4) whether the risk relates to a familiar or an unfamiliar activity; (5) whether benefits from the risks are shared with those who bear


¹⁹. But see supra note 11 and accompanying text (outlining the cool analysts' "thin" description of risk).

²⁰. The relevance of these factors in people's assessment of risk has been widely documented. See, e.g., Judgment Under Uncertainty: Heuristics and Biases (Daniel Kahneman et al. eds., 1982) (collecting a number of seminal contributions). For excellent analyses directly focused on environmental policy, see Hornstein, supra note 11; Mark Rushefsky, Elites and Environmental Policy, in Environmental Politics and Policy 261 (James P. Lester ed., 1989).
the risk; and (6) whether the risk can be eliminated, as opposed to merely being reduced.21

These premises make it impossible to reduce the objectives of environmental policymaking to any simple or single formula, and they do not imply, by any means, a blanket endorsement of the statutory formulations that cool analysts criticize. By and large, however, the perspective of moral outrage finds much to applaud in those formulations and tends to locate error precisely in those places where priority appears to have been given to considerations of economic cost at the expense of environmental, health, and safety concerns.

C. Differing Attitudes Toward Compliance

Thus, cool analysts and the morally outraged differ over the aims to be served in setting environmental standards. They are just as sharply divided in their attitudes toward compliance. For the cool analyst, the question of whether to comply with an environmental statute is yet another matter of weighing competing costs and benefits, where in this case the costs are costs of compliance and the benefits are avoidance of the fines and penalties associated with non-compliance.22 In this respect, either the environmental controls installed to comply, or the fines paid for violations, are treated identically as costs of doing business, and the firm will decide on a course of action by virtue of an analytical process in principle no different from any other business decision.

The morally outraged view compliance quite differently. For them, environmental statutes set the fundamental ground rules for responsible social behavior and lay down conditions of moral obligation analogous to protection of free speech, freedom of religion, and freedom from racial or sexual discrimination. Compliance constitutes an obligation, not a business decision, and violations are greeted with outrage.

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21. That is, a reduction from a one percent to zero risk, thus eliminating the risk, will be valued more highly than a reduction in risk from five percent to four percent.

22. Indeed, because detection is not foolproof, the situation is properly one of risk-benefit analysis, with the firm calculating expected sanctions, i.e., fines and penalties discounted by probability of detection, against benefits of non-compliance.
In the minds of some, the connotations of the term "moral" here may raise alarms of the sort upon which Justice Thomas recently remarked in his opinion in *Graham v. Collins*. Any such unease actually contributes to my purpose, which is to draw as sharp a contrast as I possibly can between the disposition of this approach toward compliance, as compared to the coolly analytical approach. It takes a good deal of effort for someone disposed toward the coolly analytical point of view to fathom the real gulf that separates the two, and yet something of the passionate intensity of the morally outraged, as they discover refusals to comply with announced environmental standards, must be understood in order to see how the dynamics of the ongoing dispositions war are influencing the emergence of environmental criminal law.

III. Policy Implementation: Is the Whole Less Than the Sum of Its Statutory Parts?

As briefly indicated above, early environmental policymaking produced a number of statutory provisions that tilted toward the moral outrage perspective toward environmental standard setting. Nevertheless, we have already remarked that criminal enforcement of those statutes was almost nonexistent until quite recently. At first blush, this seems odd, because the mechanisms and sanctions of the criminal law are, of all the compliance methods available, the most congruent to the morally outraged point of view.

In the past several years, political and legal theorists have been developing a general understanding of federal lawmaking that purports to explain observations such as this, in which certain constituents and interests gain legislative victories while quite different ones subsequently regain advantages in the processes for implementing that legislation. With respect to environmental policymaking in particular, some have argued that the history of

23. 113 S. Ct. 892 (1992). "Beware the word 'moral' when used in an opinion of this Court. This word is a vessel of nearly infinite capacity. A judgment that some will consider a 'moral response' may secretly be based on caprice or even outright prejudice." *Id.* at 912.

24. *See infra* notes 72-75 and accompanying text.

25. For a summary of the dynamics of the political process that have produced the tough standards/lax implementation pattern, see John P. Dwyer, *The Pathology of Symbolic Legislation*, 17 Ecology L.Q. 233 (1990); Daniel A. Farber, *Politics and Procedure in Environ-
United States environmental policy reveals just such an ability of the cool analysts to gain considerations in the implementation stage that offset losses in the Congress, and have argued further that this history can be understood best as the results of a political game in which members of Congress are themselves complicit in something of a deception.

The game I have in mind can be played because the vast majority of significant federal environmental statutes are not self-executing. That much is frequently evident on the face of the statutes themselves, which are phrased in terms of orders given not to a pollution source but to an administrative agency. Yet even when he or she eventually promulgates emission standards, technology standards, or any other standards of performance for pollution sources, EPA's Administrator has taken but another step in the total process of implementation. It is increasingly commonplace for federal statutes to rely upon a permitting system through which individual sources negotiate detailed terms and conditions for the lawful operation of their facilities. After the agency has issued a permit, the process of monitoring compliance begins through a variety of mechanisms ranging from the review of permi-
odic reports submitted by the source itself to on-site inspections by federal or state personnel. Inspections still do not complete the process. On the assumption that firms primarily are interested in maximizing profits, they must face sanctions for violations before they will reduce pollution—not reducing must become costly to them.

At each stage in this process, the statute’s policy position may be softened, or its implementation delayed. The EPA may fail to write the standards necessary to begin the implementation and enforcement process. The standard that the agency issues may be less stringent than the statute contemplated. The issuance of implementing regulations can take longer than stipulated in the statute. EPA can settle charges of violations for amounts of fines and penalties that are insufficient to ensure full compliance with the statute.

If the approach of cool analysis to environmental policymaking has indeed had significant influence on actual practices, we should expect that truly strict environmental requirements would be followed by relatively slow implementation, fairly lax inspections and lenient enforcement. In fact, that is a good general summary of


32. See, e.g., 33 U.S.C. § 1318(a)(B) (1988) (giving the EPA the right of entry upon premises of effluent source and right of access to records required to be maintained).

33. See, e.g., Robert W. Adler & Charles Lord, Environmental Crimes: Raising the Stakes, 59 Geo. Wash. L. Rev. 781, 782 (quoting the Exxon chairman as saying that the $1.1 billion settlement cost of the Exxon Valdez oil spill “will not curtail any of our plans”). Some costs might be imposed upon firms by tough language in the law itself, most notably the fear of negative reputational effects resulting from public detection of noncompliance. The most significant mechanism for such public detection, however, is an agency enforcement proceeding.

34. For example, the EPA wrote only six standards for hazardous air pollutants (“HAPs”) under the 1970 version of § 112 of the Clean Air Act, 42 U.S.C. §§ 7401-7626 (1988), despite the existence of several hundred known HAPs.

35. For example, the EPA watered down the RCRA provision prohibiting land disposal of hazardous wastes unless the EPA determines that there will be no migration of hazardous constituents from the disposal site for as long as the wastes remain hazardous. See Natural Resources Defense Council v. EPA, 907 F.2d 1146, 1152 (D.C. Cir. 1990).

36. EPA does not meet approximately 85% of its statutory deadlines. Percival et al., supra note 1, at 669 (citing ENVIRONMENTAL & ENERGY STUDY INST., STATUTORY DEADLINES IN ENVIRONMENTAL LEGISLATION 12 (1985)).

37. See, e.g., Adler & Lord, supra note 33.
what we find. In area after area, from sweetheart settlements of Superfund claims under the Gorsuch-Burford EPA,\footnote{See Dale Russakoff & Cass Peterson, Appointment Calendar Given to Senate; Lawwell Met Often with Firms' Executives, WASH. POST, Feb. 17, 1983, at A2 (detailing frequent meetings between EPA officials and chemical industry executives at which “sweetheart” settlements of Superfund claims allegedly were made).} to the failure to issue hazardous air pollutant standards under Section 112 of the Clean Air Act,\footnote{See Dwyer, supra note 25 (detailing EPA's resistant implementation of the literal language of § 112 of the Clean Air Act).} to OSHA’s inability to regulate toxic exposure in the workplace under section 6(b)(5) of the Occupational Safety and Health Act,\footnote{29 U.S.C. § 655(b)(5) (1988).} to the tendency of the supposedly tough Best Available Technology (“BAT”) standards to recede back to the more lenient Best Practicable Technology (“BPT”) standards for water pollutants,\footnote{See 33 U.S.C. § 1311(b)(1)-(2) (1988) (establishing a timetable for achievement of statutory objectives, using BAT and BPT terminology to measure enforcement).} by the time environmental policymaking reaches the streets, tough legislative purposes appear to lose steam as they are translated into concrete results.\footnote{See Dwyer, supra note 25, at 234 (arguing that regulators and judges “are loath to implement and enforce a statute whose costs are grossly disproportionate to its benefits”).} From the perspective of cool analysis such under-enforcement of many environmental statutes is, if not optimal, better than fuller enforcement would be, because the policies encoded in the statutes are unrealistic and irrational.\footnote{Id.}

As I stated a moment ago, theorists have been developing an understanding of why and how such results as these might be expected to unfold. Its central element involves an explanation of how such results are consistent with the motivation and actions of lawmakers—primarily members of Congress.\footnote{Id. at 282-83 (“By taking an uncompromising stance toward hazardous airborne chemicals in [Clean Air Act] section 112, Congress was able to claim credit for protecting health and the environment while avoiding difficult policy questions and shifting the political problems to EPA.”).}

Lawmakers confront a political problem of balancing the conflicting preferences of ardent environmentalists and other citizens who can be rallied by them,\footnote{Id. at 242-44 (detailing the influence of environmentalist pressure on § 112 of the Clean Air Act and its chief architect, Senator Edmund Muskie).} especially on the heels of some cata-
strophic event, such as the Exxon Valdez oil spill,\textsuperscript{46} or the 1969 oil spill in the Santa Barbara Channel,\textsuperscript{47} versus the industrial interests and their allies.\textsuperscript{48} It is in their interests to mollify both groups if they can,\textsuperscript{49} and the staged nature of the policy implementation process seems to provide them opportunities to do so. They can satisfy the former group at the statute writing stage, where tough language and tough rhetoric can be served up to concerned citizens,\textsuperscript{50} while satisfying the latter group at the implementation stage, where the public is less able to scrutinize interactions between agency and industry,\textsuperscript{51} and where ex post revelations of lax enforcement can be explained away. At worst, such revelations lead only to a further play of the cycle of tough reform legislation followed by lax implementation.\textsuperscript{52}

In sum, the theory suggests that legislators attempt to “lash themselves to the mast” when fury over environmental degradation is running high, by placing tough rhetoric in the context of an administrative process that will take years to complete, and then to “strike while the iron is cold,” letting the implementation process loosen standards, relax inspections, and settle for low levels of fines, once the short-attention-span public has turned to other concerns.\textsuperscript{53} Contrary to what Judge Skelly Wright supposed, members of Congress emerge as individuals who secretly desire that “legislative purposes, heralded in the halls of Congress” do indeed become

\textsuperscript{46} See Adler & Lord, supra note 33, at 782-84 (summarizing the Exxon Valdez oil spill and the government’s response).

\textsuperscript{47} See, e.g., Back to the Santa Barbara Channel, Wash. Post, Nov. 20, 1982, at A22 (opposing renewed oil exploration in Santa Barbara Channel following a 1969 oil spill).

\textsuperscript{48} Neil K. Komesar, Injuries and Institutions: Tort Reform, Tort Theory, and Beyond, 65 N.Y.U. L. Rev. 23, 49-50 (1990) (arguing that the balance sways in favor of the polluters at the implementation stage).

\textsuperscript{49} See Dwyer, supra note 25, at 242-44; see also Komesar, supra note 48, at 49-50.

\textsuperscript{50} Komesar, supra note 48, at 49-50.

\textsuperscript{51} Id.

\textsuperscript{52} See Dwyer, supra note 25; Farber, supra note 25, at 68-69; see also Komesar, supra note 48, at 49-50.

\textsuperscript{53} Roger G. Noll & James E. Krier, Some Implications of Cognitive Psychology for Risk Regulation, 19 J. LEGAL STUD. 747, 777 (1990). A variation on this account does not postulate that environmental legislation is designed to enable lax implementation and enforcement to counterbalance tough statutory instructions. Instead, the explanation offered for the various slippages is that, whatever legislators may have intended, the agencies’ regulated clients inevitably exert a strong influence on the agencies’ policy implementations. See Komesar, supra note 48, at 49-50.
“lost or misdirected in the vast hallways of the federal bureaucracy,” in order that the overall effect of the entire implementation process at least approximates the result that cool analysis endorses, that is, that risks to health and environmental values are exchanged for other benefits according to their net impact on social welfare.\footnote{See Calvert Cliffs’ Coordinating Comm. v. United States Atomic Energy Comm’n, 449 F.2d 1109, 1111 (D.C. Cir. 1971). Judge Wright wrote that it was the judiciary’s role to see that legislative purposes were not “lost or misdirected in the vast hallways of the federal bureaucracy.” Id.}

IV Moral Outrage and Law Enforcement

Whatever the appeal of this account of the initial rounds of environmental policy, it is in the end unconvincing as a stable account of environmental law. In fact, if its explanation of legislative behavior is temporarily accurate, the consequences of such behavior are ultimately to undermine the mix of tough policy/lax implementation that it is meant to explain.

This account fails, as Dan Farber notes, because “it is hard to see how this situation could be sustained in the long run unless voters are not just ignorant or even irrational but also outright fools, incapable of learning even after sustained experience.”\footnote{See Dwyer, supra note 25, at 286 (arguing that by passing unrealistic “symbolic legislation,” Congress “means less ‘do it this way’ than ‘we’re serious, do something now’”).} No evidence exists that the morally outraged meet these conditions, and evidence to the contrary is growing.

For example, anyone who listens carefully to tacticians for the morally outraged will come to know that they understand implementation and enforcement are the processes which ultimately count. The vocal opposition to efforts of Vice President Quayle’s Competitiveness Council to intervene in the EPA’s implementation of the Clean Air Act is just a single recent example.\footnote{Farber, supra note 25, at 68.}

Second, while the historical account of a pattern of tough legislation followed by lax enforcement certainly accords with some of

\footnote{For example, David Donger, then a senior attorney for the Natural Resources Defense Council, warned that “White House officials are radically warping the regulations on which the public depends to translate [Congress’] laws into real-life protections.” See John Hendren, Senate Committee Looks into Quayle’s Competitiveness Council, STATES NEWS SERVICE, Oct. 24, 1992.}
the evidence with respect to some statutes, and, while implementation undeniably has been the soft underbelly of the entire policy process, there is ample evidence of the morally outraged increasingly insisting on, and getting, stepped-up and earnest enforcement. For instance, the revelation that 2.7 billion pounds of HAPs had been released into the air in 1987,⁵⁸ and that these releases were lawful, due to the failure of the EPA to implement section 112 of the Clean Air Act, did not produce a thoughtful, reflective, “well, it’s a good thing that EPA has not fully implemented the law, because it’s an irresponsible and unrealistic law,” from the public. Instead it produced hydraulic pressure on the EPA to make section 112 work. A substantial overhaul of the HAPs program, designed to facilitate its rapid implementation, was included in the 1990 amendments to the Clean Air Act. More importantly, and more to the point, the overhaul seems to be working.⁶⁰

Across the field of pollution control legislation, a similar pattern can be seen repeatedly. Pockets of lax implementation and lenient enforcement, having been brought to light, stimulate efforts to accelerate implementation and stiffen enforcement. A variety of indicators all suggest enforcement efforts are increasing and improving. For instance, in fiscal year 1991, EPA initiated 3,925 administrative enforcement actions, slightly off its fiscal 1989 record of 4,136, but up considerably from the approximately 1,000 in 1982—the last full year of the Burford-Gorsuch led EPA.⁶⁰ Penalties assessed against violators, via either administrative or judicial

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⁵⁸. ECONOMICS AND TECHNOLOGY DIVISION, U.S. ENVTL. PROTECTION AGENCY, THE TOXICS RELEASE INVENTORY 109 (1989). This information was produced because of the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §§ 11001-11050 (1988), passed in response to the Bhopal gas release and explosion. TOXICS RELEASE INVENTORY data reflects only about five percent of total emissions, but this fact is known and is spurring further cries to speed implementation and tighten enforcement.

⁵⁹. Signs indicate that the 1990 changes are producing accelerated implementation. In late 1992, EPA proposed emissions standards for a group of 118 hazardous organic compounds which, if they are finalized in 1993, will mean that the number of pollutants controlled in three years under the 1990 amendments to § 112 will be 15 times greater than those EPA controlled in the preceding 20 years under the original statute. National Emission Standards for Hazardous Air Pollutants; Availability: Draft Schedule for the Promulgation of Emission Standards, 57 Fed. Reg. 44,147, 44,147-55 (1992) (to be codified at 40 C.F.R. pt. 60) (proposed Sept. 24, 1992).

⁶⁰. OFFICE OF ENFORCEMENT, U.S. ENVTL. PROTECTION AGENCY, FY 1991 ENFORCEMENT ACCOMPLISHMENTS REPORT 3-3 (April 1992) [hereinafter ENFORCEMENT REPORT].
actions, have increased steadily from a fiscal year 1982 low of less than $5 million to a 1991 figure of $73 million.\textsuperscript{61} Average fines have increased, as well as totals: between 1984 and 1990, average corporate fines under the Criminal Fine Enforcement Act of 1984\textsuperscript{62} increased from $49,986 to $182,332.\textsuperscript{63} Criminal enforcement actions also rose in a number of categories, including a record of eighty-one cases referred to the Department of Justice for prosecution, charging a total of 104 defendants (previous highs being sixty-five cases referred and a hundred defendants charged in 1990).\textsuperscript{64} A total of eighty-two defendants were convicted in fiscal year 1991, with twenty-eight receiving jail time totaling 963 months.\textsuperscript{65}

These recent movements in stepped up enforcement, however imperfect they remain, have often been framed by the morally outraged as failures of government to live up to its own commitments, as reflected in the environmental statutes themselves. When a movement for tougher enforcement gains momentum, one fear that elected officials have is precisely that the outraged public will come to embrace the explanatory theory we have been reviewing—will come to see them as complicit in instances of lax implementation and enforcement, as pronouncers of commitments that they never intended to fulfill. When the public does develop such an opinion, experience teaches that the result is considerable political embarrassment for those officials. As an example, consider the publicity that has surrounded the so-called “runaway” grand jury that heard evidence with respect to alleged criminal violations in the operation of the Department of Energy’s (“DOE”) Rocky Flats Nuclear Weapons Plant.\textsuperscript{66} Eventually, indictments were entered against

\textsuperscript{61} Id. at 3-5.
\textsuperscript{64} \textit{Enforcement Report}, supra note 60, at 3-2.
\textsuperscript{65} Id.
Rockwell International as a corporate entity (who operated the facility under contract with DOE), but not against any individual employees, despite the apparent desires of the grand jury. The story developed the smell of scandal, and hence much wider public interest, because some observers linked the failure to indict individuals to the government's desire to cover up the complicity of federal employees in the illegal acts of Rockwell employees running the facility. The combination of environmental violations and government deception and complicity amounts to a toxic mix, and is sure to drive cool analysis further away from victories in the policy field. Predictably, public officials strenuously deny that there has been any such cover-up of any kind involving them.

In rationalizing the decision not to indict either Rockwell or DOE employees individually, the Government's Sentencing Memorandum concluded in part that "[w]hile the investigation showed that hazardous wastes were indeed [improperly treated, in violation of RCRA], no charges are being brought concerning this practice, since it was endorsed and directed by DOE at a broad institutional level. In this particular circumstance, criminal prosecution is not appropriate." This conclusion seemed nonsensical to the grand jury, one of whom said later that "[w]e wanted to indict everyone who committed a crime. We didn't care who they were or how high up the chain of command they were."

The attitude expressed by this grand juror illustrates a reason for the recent attention being paid to criminal enforcement. From the perspective of the morally outraged, environmental statutes set policy that takes precedence over other job responsibilities and institutional priorities. To this way of thinking, compliance with these statutes can not appropriately be analyzed as a cost of doing business, but is a responsibility which supersedes such considera-

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tions. No sanctioning system conveys this message in our society as unambiguously as the criminal law, the function of which is to announce sanctions, as opposed to prices, the payment of which allows violations to continue.\textsuperscript{72} The criminal law means to supersede ordinary institutional instructions, to grab the attention of the individual, to authorize and command defiance of even broad institutional practices, if that is what it takes to avoid a criminal violation.\textsuperscript{73}

V Conclusion

The morally outraged have looked at the same historical record of environmental policymaking that has formed the basis for the cool analysts’ hope that lax implementation could mitigate the undesirable effects of unrealistic legislation. They have seen a landscape of neglect, failure and under-enforcement. Reacting to this scene, they have turned to criminal sanctions, which are society’s loudest trumpets for announcing that the proscribed activities are not to be treated as part of the marketplace of commodities available for exchange with other valuables. Criminal sanctions are identified with society’s moral disapprobation, which is exactly the message that the morally outraged mean to convey.\textsuperscript{74}

\textsuperscript{72} For the distinction between prices and sanctions, and the association of the criminal law with the latter, see Robert Cooter, \textit{Prices and Sanctions}, 84 \textit{COLUM. L. REV.} 1523 (1984). Richard Posner has described a similar distinction between “conditional” and “unconditional” deterrence:

We want to deter only those breaches in which the costs to the victim of the breach are greater than the benefits to the breaching party. But society does not want to deter only those rapes in which the displeasure of the victim is shown to be greater than the satisfaction derived by the rapist from his act.


\textsuperscript{73} While the criminal law tries, ex ante, to send this clear and unequivocal message to citizens as a norm to guide their individual behavior, there may still be reasons, ex post, to recognize significant and pervasive institutional norms as a mitigating circumstance in the subsequent decision whether to prosecute. See Meri Dan-Cohen, \textit{Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law}, 97 \textit{HARV. L. REV.} 625 (1984) (analyzing the complexities involved in reducing the tendency of a citizen’s knowledge of such an ex post standard to totally undermine the desired force of the ex ante message).

\textsuperscript{74} In this respect, the moral outrage perspective is not bothered by the fact that a high degree of overlap now exists between violations that are subject to civil fines and those that are covered by criminal penalties. Some commentators have raised objections to the obliteration of the distinction between crimes and torts that is entailed by this overlap. \textit{See, e.g.,}
law underscores a rejection of the "cost of doing business" approach to penalties for noncompliance.

The idea that elected and other public officials might have designed the policy implementation system to water down tough standards makes sense to cool analysts, both descriptively and normatively. That idea, however, actually handicaps the ability of cool analysis to respond to the current insistence on enhanced criminal enforcement, because public officials who might otherwise urge proceeding cautiously with such measures risk having their urgings construed as confirmation that their support for tough standards was indeed part of a political game designed to deceive the morally outraged. When the morally outraged return to the policy arena for tougher sanctions, officials are constrained by earlier endorsement of tough standards, and are unable to make the "cost of doing business" arguments.75

This thought brings us full circle, back to the initial observation that, to date, much of the debate over the reach of environmental criminal law has emphasized issues of general criminal law officials cannot, even if they were so inclined, explain to citizens that

John C. Coffee, Jr., Does "Unlawful" Mean "Criminal"?: Reflections on the Disappearing Tort/Crime Distinction in American Law, 71 B.U. L. Rev. 193 (1991). In contrast, the morally outraged want to signal that those actions that earlier were treated as violations subject to civil sanctions all along had been meant to be taken as moral responsibilities. Civil sanctions turned out to be susceptible to the misinterpretation that the choice of whether to comply was just another business decision, so that the same acts now have been made subject to criminal sanctions, which are not so easily vulnerable to that misinterpretation—especially if they result in incarceration of individuals and not merely monetary penalties.

75. A consistent cool analyst can, without fear of contradiction, say the following about tightening sanctions:

The concern is that high penalties will lead to "overdeterrence" for activities that society does not wish to entirely prohibit. For example, in the case of oil spills, we do not want to raise the "price" of causing an oil spill so high that we deter firms from engaging in the socially beneficial practice of oil transportation. Neither do we want oil tankers to spend more than a socially desirable amount of their resources trying to ensure that adequate oil spill prevention safeguards exist.

Cohen, supra note 63, at 10-11. On the other hand, someone who supports the standards of existing federal laws regulating oil spills cannot make such a statement without fear of appearing either contradictory or duplicitous, because existing standards do, on their face, entirely prohibit spilling oil. See 33 U.S.C. § 1321(b)(3) (1988) (prohibiting "the discharge of oil into or upon the navigable waters of the United States" with a few exceptions not related to achieving the optimal amount of oil spillage).
tough standards should not be backed up with tough criminal sanctions on the ground that the standards were set at too stringent a level initially. That would be politically disastrous to officials who have endorsed the standards, and ultimately would turn into an indictment of themselves for deception and complicity. When a debate is being lost, one maneuver is to change the topic.