ARTICLES

DOING MORE OR DOING LESS FOR THE ENVIRONMENT: SHEDDING LIGHT ON EPA’S STEALTH METHOD OF ENVIRONMENTAL ENFORCEMENT

Ronald H. Rosenberg

Abstract: Since the 1970s, environmental protection goals have gone from general statements of political desire to highly articulated systems of environmental regulation implemented by federal, state, and local governments. Environmental statutes have been enacted giving administrative agencies such as the U.S. Environmental Protection Agency (EPA) the responsibility for translating broad policy goals into specific regulatory requirements. Through its enforcement program, EPA seeks to assure that these general goals are achieved by individual actors. This Article examines a recent trend in EPA’s practices, increased reliance on internal agency methods of enforcement. The study analyzes EPA’s administrative enforcement system with particular emphasis on the imposition of civil penalties. Its central conclusion is that EPA’s administrative enforcement dominates the Agency’s enforcement practices, dwarfing judicially supervised enforcement. In addition, this mechanism yields outcomes emphasizing settlement, at process at variance with EPA rules that renders outcomes in a context largely invisible from public scrutiny.

ADULT SUPERVISION REQUIRED: THE COMMONWEALTH OF MASSACHUSETTS’S RECKLESS ADVENTURES WITH AFFORDABLE HOUSING AND THE ANTI-SNOB ZONING ACT

Jonathan Witten

Abstract: Recognizing that municipalities are inherently selfish and that they would intentionally exclude certain land uses and structures, the ma-
A majority of states have required that their cities and towns plan for and accommodate undesirable land uses within their borders. The planned incorporation of undesirable and desirable land uses is a fundamental attribute of states that require and enforce the preparation of coordinated and rationally developed comprehensive plans. This Article discusses the approach taken in Massachusetts—a non plan state—and its myopic and regressive mechanism for compelling the construction of affordable housing. The Article suggests that the Massachusetts example is a failure of law and policy and that the statute, both abusive and abused, must be repealed. In its stead, Massachusetts must look to the success of numerous other states that have incorporated the development of affordable housing—and other land uses—within a rationally developed, and legally meaningful, comprehensive plan.

NOTES

**Fast Food, Zoning, and the Dormant Commerce Clause: Was It Something I Ate?**

*Jackson S. Davis*

[pages 259–288]

**Abstract:** The obesity rate has risen to epidemic proportions in the United States. Fast food restaurants have recently come under scrutiny for their contribution to the growth of America’s waistlines. Communities across the country, recognizing obesity as a issue of serious public health concern, are looking for innovative ways to halt the increasing rate of obesity. One such method is the use of zoning to exclude fast food restaurants entirely, as a matter of public health. Zoning regulations of this type, however, may confront challenges under the dormant commerce clause, which restricts the power of states to burden interstate commerce.

**Revisiting Asbestos-Contaminant Exposure, Regulation, and Reckoning: When Death Is in the Air**

*Bianca Forde*

[pages 289–320]

**Abstract:** Amphibole and tremolite are related forms of contaminant asbestos that are extremely toxic in nature. However, the U.S. Environmental Protection Agency (EPA) has not specifically listed these asbestos-forms in the Clean Air Act (CAA) or its implementing regulations because they are not commercially produced. This exclusion is difficult to
justify in light of the well-established link between exposure to these contaminants and asbestos-related disease. This Note discusses the regulatory loophole created by the current CAA regulatory scheme and uses the pending criminal action against W.R. Grace & Company to expose the need for regulations in this area. This Note calls for EPA to promulgate explicit regulations on contaminant-asbestos. Absent regulatory action, this Note urges courts to interpret the CAA in accordance with congressional intent to ensure that the knowing emission of hazardous pollutants does not go unpunished.

A FRAMEWORK FOR ALTERNATIVE ENERGY DEVELOPMENT: SHIFTING FROM DRILLING RIGS TO RENEWABLES

Timothy Holahan

[pages 321–348]

Abstract: In the age of $100-a-barrel oil and global warming, the development of sources of alternative energy is a critical component of political and popular discourse. Recently, the Energy Policy Act of 2005 increased funding and tax credits for clean alternative energy. Several projects involving industry and local regulators have been progressing through the planning and development stages. Yet, despite the favorable political and regulatory climate surrounding alternative energy projects, such projects continue to encounter resistance because of projected costs and local “not in my backyard” (NIMBY) concerns. One program which would minimize costs and NIMBY-type reactions is “Rigs to Renewables,” which would place renewable energy stations on obsolete offshore oil rigs. In order to establish an adequate legal and regulatory framework for this program, its creators should incorporate the strengths of the existing “Rigs to Reefs” program, while improving on its weaknesses.

PUTTING INTERNATIONAL AVIATION INTO THE EUROPEAN UNION EMISSIONS TRADING SCHEME: CAN EUROPE DO IT FLYING SOLO?

Daniel B. Reagan

[pages 349–384]

Abstract: In December 2006, the European Commission announced a proposal for a directive that would bring international civil aviation within its Emissions Trading Scheme, the most ambitious international carbon dioxide emissions trading scheme to date, and the European Union’s primary means of meeting its Kyoto Protocol obligations. While
aviation and environmental stakeholders throughout the world have showed strong support for the proposal, representatives of aviation interests inside, and especially outside, the European Union have reacted with skepticism and concern. This Note discusses the international civil aviation regulatory framework and the mechanics of the proposed directive. It then explores the political, technical, and legal implications of the proposed legislation and concludes that the European Commission should not include international aviation in the European Union Emissions Trading Scheme, but rather should vigorously pursue multilateral international aviation emissions reductions through the International Civil Aviation Organization.
DOING MORE OR DOING LESS FOR THE ENVIRONMENT: SHEDDING LIGHT ON EPA’S STEALTH METHOD OF ENVIRONMENTAL ENFORCEMENT

RONALD H. ROSENBERG*

Abstract: Since the 1970s, environmental protection goals have gone from general statements of political desire to highly articulated systems of environmental regulation implemented by federal, state, and local governments. Environmental statutes have been enacted giving administrative agencies such as the U.S. Environmental Protection Agency (EPA) the responsibility for translating broad policy goals into specific regulatory requirements. Through its enforcement program, EPA seeks to assure that these general goals are achieved by individual actors. This Article examines a recent trend in EPA’s practices, increased reliance on internal agency methods of enforcement. The study analyzes EPA’s administrative enforcement system with particular emphasis on the imposition of civil penalties. Its central conclusion is that EPA’s administrative enforcement dominates the Agency’s enforcement practices, dwarfing judicially supervised enforcement. In addition, this mechanism yields outcomes emphasizing settlement, at process at variance with EPA rules that renders outcomes in a context largely invisible from public scrutiny.

INTRODUCTION

Government regulation of environmental quality is relatively new, with the main environmental protection statutes having been first enacted by Congress only during the 1970s. This decade witnessed the passage of at least eighteen major environmental protection statutes, including the Clean Air Act (CAA), the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Toxic Substances Con-

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In 1970, the U.S. Environmental Protection Agency (EPA or Agency) was established to act as the principal environmental policy-maker and regulation-implementing authority under the legislation that would soon be enacted.\footnote{Environmental Protection Agency, 35 Fed. Reg. 15,623 (Oct. 6, 1970). The establishment of EPA was achieved during the presidency of Richard M. Nixon in 1970. Id. Following the signing of the National Environmental Policy Act (NEPA) on New Years Day, 1970, President Nixon proclaimed the decade to be one of environmental transformation in his State of the Union address. An Agency for the Environment, EPA History, US EPA, http://www.epa.gov/history/publications/origins6.htm (last visited Apr. 14, 2008) [hereinafter An Agency for the Environment]. During the spring of 1970, the President decided to establish a separate regulatory agency to manage the enforcement of environmental policy in the federal government. Id. On July 9, 1970, he transmitted Reorganization Plan Number 3 to the Senate and the House of Representatives to inform Congress of his wish to consolidate functions of many departments, bureaus, and other diverse federal offices to form a new EPA. Id.; see Environmental Protection Agency, 35 Fed. Reg. at 15,623–26. Hearings were held over the summer of 1970 and by December 2, 1970, the EPA was in operation. See An Agency for the Environment, supra.} Acting under these congressionally legislated powers, EPA embarked upon the complex task of designing and executing a comprehensive set of regulations establishing environmental quality norms to protect the nation’s air, water, and land, as well as human and ecosystem health and wellbeing.\footnote{Building an Agency, EPA History, US EPA, http://www.epa.gov/history/publications/formative3.htm (last visited Apr. 14, 2008).} As a regulatory agency, EPA has translated these diverse statutory directives into a sweeping and complex set of environmental rules affecting a variety of activities undertaken by both private firms and by individuals.\footnote{See id.} These standards set a wide array
of performance, monitoring, and recordkeeping responsibilities, and, as federal regulations, they carry the force of law.6

However, those regulated by EPA rules do not immediately come into compliance with them. Environmental regulations are not self-enforcing and frequently, when they ask regulated entities to assume new economic costs or to change their methods of operation, they are resisted.7 As part of federal environmental policy, EPA has also developed both coercive and cooperative tactics to achieve compliance with its many rules.8 Using the threat of punishment to encourage voluntary compliance, EPA has adopted an enforcement program that threatens noncompliant behavior with a variety of judicial and administrative sanctions, believed necessary to achieve the environmental goals of federal law.9 Environmental law authorizes a range of enforcement techniques that can impose both civil remedies—injunctive and financial—and criminal penalties.10 However, both of these enforcement methods require a federal enforcement lawsuit.11 Federal environmental statutes provide an alternative enforcement route to resource-intensive and time-consuming judicial intervention: EPA’s issuance of administrative injunctive and penalty orders.12 Increasingly, EPA has selected this in-house approach by taking civil enforcement actions within the agency’s own administrative law structure to punish environmental violators.13

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6 An Agency for the Environment, supra note 3. Professor Koch has described this phenomena in the following terms: “Legislative rules are rules made pursuant to delegated authority to make rules. Because they are an extension of a legislative act, they have the force of law and are subject to very limited judicial review . . . . The drafters of the [Administrative Procedure Act] characterized these rules as ‘true administrative legislation.’” Charles H. Koch, Administrative Law and Practice § 4.11[2] (2d ed. 1997).

7 See, e.g., Clean Air Act, 42 U.S.C. § 7410(a)(2)(F) (2000) (discussing state implementation plans for primary and secondary National Ambient Air Quality Standards). Regulations adopted pursuant to environmental statutes become enforceable on their own terms or by virtue of being incorporated into permits or licenses issued to an individual, firm, or institution. See id. Upon breach of the conditions imposed by the regulations, the government or citizen groups may seek enforcement and penalties against the violator in court or in an administrative proceeding. See, e.g., id.


9 See id. at 3–5.


11 See, e.g., id.

12 Environmental Enforcement, supra note 8, at 82–83.

13 See id. at 81.
During the last decade, these administrative enforcement cases have become so numerous that they far outnumber court-ordered actions and result in the payment of millions of dollars in civil penalties and in the imposition of injunctive compliance orders. This practice is so pervasive that one recent assessment has estimated that approximately ninety percent of EPA’s enforcement actions are administrative, not judicial, in nature. For example, in fiscal year 2006, EPA data reported that the agency initiated 4647 administrative complaints while issuing 1438 compliance orders and imposing 4624 final administrative penalty orders for approximately $42 million in fines. To put these

14 See EPA, COMPLIANCE AND ENFORCEMENT ANNUAL RESULTS: NUMBERS AT A GLANCE, FISCAL YEAR 2006 (2006), available at www.epa.gov/compliance/resources/reports/end-of-year/eoy2006/fy2006numbers.pdf [hereinafter 2006 NUMBERS AT A GLANCE]. Contrary to popular belief, civil penalties paid by defendants do not become the property of EPA, but rather they are paid into the U.S. Treasury. Steel Co., AKA Chicago Steel & Pickling Co. v. Citizens for a Better Env’t, 523 U.S. 83, 106 (1998). In Steel Co., the U.S. Supreme Court addressed this issue within the context of an Emergency Planning and Citizen Right-to-Know Act (EPCRA) citizen suit enforcement action. Id. There, Justice Scalia wrote that “civil penalties authorized by the statute... might be viewed as a sort of compensation or redress to respondent if they were payable to respondent. But they are not. These penalties—the only damages authorized by EPCRA—are payable to the United States Treasury.” Id. In general, all civil penalties are payable to the U.S. Treasury and not to EPA. See Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167, 173 (2000) (penalties under the CWA are payable to the U.S. Treasury). 

Most federal environmental statutes include civil penalties imposing a range of maximum penalties. See, e.g., Adjustment of Civil Monetary Penalties for Inflation, 40 C.F.R. § 19.1–.4 (2007). In 2004, EPA adopted its Adjustment of Civil Monetary Penalties for Inflation rule to adjust EPA’s civil monetary penalties for inflation. See id. (increasing the per-day penalties for violation of the CWA to $32,500 and $6500 for minor stationary source field citation violations, the CAA to $32,500 with a maximum of $270,000, the SDWA to $32,500, and EPCRA to $97,500 for subsequent violations).


16 2006 NUMBERS AT A GLANCE, supra note 14. EPA’s enforcement data reports, however, have been seriously disputed by outside organizations that claim EPA’s data has been exaggerated to hide a significant reduction in enforcement results. See ENVTL. INTEGRITY PROJECT, PAYING LESS TO POLLUTE: ENVIRONMENTAL ENFORCEMENT UNDER THE BUSH ADMINISTRATION 2 (2007), available at http://www.environmentalintegrity.org/pubs/Paying%20Less%20to%20Pollute.pdf (noting that Justice Department cases were down seventy percent, civil penalties declined by twenty-four percent, and criminal fines were down thirty-eight percent comparing 1996 to 2000 with 2002 to 2006). More specifically, the Environmental Integrity Project (EIP) claims that for 2006 the number of administrative penalty settlements was actually 2056 and that the much larger EPA-reported figure was due to large numbers of “amnesty agreements” with large animal feeding operations that included nominal $500 civil penalties. See id. at 6, 10 app.I; CLAUDIA COPELAND, CRS REPORT FOR CONGRESS, AIR QUALITY ISSUES AND ANIMAL AGRICULTURE: EPA’S AIR COMPLI-
numbers into a comparative perspective, during this same year, EPA reported that the total number of judicial enforcement cases concluded in federal court totaled only 173 and that $82 million were collected in civil penalties. A private estimate places the number of civil enforcement law suits filed by the Department of Justice (DOJ) in fiscal year 2006 to be only fifteen cases. The overall trends in EPA enforcement demonstrate consistent reductions in the number of judicial civil case referrals and case conclusions, as well as criminal sentences and fines. While at the same time, the available data shows that EPA ad-

17 2006 Numbers at a Glance, supra note 14. Perhaps reflecting the seriousness of judicially resolved enforcement actions, the fiscal year 2006 total of judicially imposed civil penalties stood at $82 million, or nearly double the amount generated by the administrative system. Id. This number is also disputed by the EIP as being inflated due to the inclusion of a $40 million—and possibly uncollectible—default judgment gained against one large polluter who did not defend an enforcement case. Envtl. Integrity Project, supra note 16, at 1–3. The EIP’s analysis of fiscal year 2006 penalty data agreed with EPA’s total of $42 million for administrative penalties. Id. at 10 app.I. They disagreed, however, with the EPA’s claim that it had collected a total of $124 million for both judicial and administrative cases. Id.; 2006 Numbers at a Glance, supra note 14. The EIP found only $49 million in judicial civil penalties for a total of just $91 million. Envtl. Integrity Project, supra note 16, at 10 app.I.

18 Envtl. Integrity Project, supra note 16, at 10 app.I. As low as this number may seem, it actually is higher than the 2002 to 2006 average of fourteen. See id. The EIP, a Washington, D.C. EPA watchdog group headed by the former EPA enforcement chief, derived this information from a Freedom of Information Act request and examination of EPA’s Enforcement and Compliance History online database. Id. at 7.

19 See Environmental Enforcement, supra note 8, at 112. Taking an annual average from fiscal year 2002 to fiscal year 2006 from EPA-reported enforcement statistics, the following patterns of EPA enforcement performance emerge, with fiscal year 2006 being close to or under the five year averages:
1) Civil judicial referrals average 266 per year as compared to 286 in fiscal year 2006.
2) Civil judicial case conclusions average 183 per year as compared to 173 in fiscal year 2006.
3) Criminal sentences imposed average 155 years as compared to 154 years in fiscal year 2006.
4) Criminal fines imposed average $64.6 million per year as compared to $43 million in fiscal year 2006.

Comparisons to the prior five year period, fiscal year 1997 to fiscal year 2001, tell a different story:
1) Civil judicial referrals average 346 per year.
2) Civil judicial case conclusions have no data available.
3) Criminal sentences imposed 187 years.
4) Criminal fines imposed average $255.4 million.

This reduction in judicially imposed enforcement penalties has led several commentators to opine that the EPA enforcement system has become ineffective. See Environmental Enforcement, supra note 8, at 112; William L. Andreen, Motivating Enforcement: Institutional Culture and the Clean Water Act, 24 Pace Envtl. L. Rev. 67, 76 (2007). Some have
ministrative penalties have become the only increasing form of enforcement undertaken over the last decade. This striking rise in in-house environmental enforcement has occurred just when more visible judicial enforcement has diminished.

Administrative enforcement has not only become the more frequently selected alternative to judicial enforcement, but it has also given rise to the development of an administrative analogue to the federal judicial system—an administrative judicial system. This system conducts adjudicatory proceedings governed by its own Agency rules of practice, largely within the confines of EPA, in an insulated administrative format with significantly less public involvement or awareness. Despite the increasing importance of EPA’s internal enforcement regime, the workings of this administrative enforcement process have operated as a stealth system, largely escaping the view of the public. Over the years, it has also avoided scholarly examination both in terms of its methods and its results. Significantly, there has been no concerted

been charitable in their comments, stating that “the volume of civil enforcement has fluctuated over time, in part due to resource constraints, and in part due to the philosophical leanings of various administrations.” See ENVIRONMENTAL ENFORCEMENT, supra note 8, at 112. Worse, this drop has led some critics to suggest that:

Breakdowns in federal enforcement seriously undercut law enforcement efforts, produce confusion in the regulated community, encourage non-compliance, and subject the EPA to ridicule. Such lapses also breach an implied social contract with those regulated entities who, relying upon responsible enforcement, have invested substantial amounts of time and money to comply with the law.

Andreen, supra, at 76 (footnote omitted); see also John Solomon & Juliet Eilperin, Bush’s EPA Is Pursuing Fewer Polluters, WASH. POST, Sept. 30, 2007, at A1 (noting a seventy percent drop in civil lawsuits to enforce environmental law pursued between 2002 and 2006, relative to the late 1990s).

20 ENVTL. INTEGRITY PROJECT, supra note 16, at 10 app.I. This EIP data indicates more than a doubling in EPA administrative penalty settlements from 1004 in 1996 to 2056 in 2006. Id. There is no data in this report indicating the proportion of administrative penalties imposed as the result of a contested case in the EPA administrative system. These figures also demonstrate a fairly stable total of administrative civil penalties collected, at approximately $30 million per year, with 2006 reaching a higher total of $42 million. Id.

21 See ENVIRONMENTAL ENFORCEMENT, supra note 8, at 94.

22 See id.

23 A cursory description of this administrative enforcement system is usually within most environmental texts and treatises. See Joseph J. Lisa, EPA Administrative Enforcement Actions: An Introduction to the Consolidated Rules of Practice, 24 TEMP. J. SCI. TECH. & ENVTL. L. 1, 3–4 (2005) (providing a description of EPA’s existing Part 22 Rules of Practice); Richard R. Wagner, The U.S. EPA Administrator’s Assessment of Civil Penalties: A Review of the Sources of Authority and the Administrator’s Regulations, 22 WM. & MARY ENVTL. L. & POL’Y REV. 149, 156–57 (1997) (providing a brief description of pre-1999 Part 22 procedure and author-
attempt to analyze reported case decisions that have been generated by
these administrative enforcement methods. The augmented use of
EPA’s administrative civil penalty technique of enforcing environmental
rules is the focus of this Article.

Part I will provide an overview of EPA’s environmental enforce-
ment activities with a description of the changing mix of enforcement
tools over the last decade.²⁴ Part II will describe EPA’s practice of ad-
mnistrative enforcement, concentrating on the methods that are em-
ployed that may result in the imposition of administrative penalties.²⁵
Part III will examine the empirical data of reported administrative en-
forcement actions taken under five environmental statutes over a five-
year period to analyze EPA Administrative Law Judge (ALJ) decisions
on the design of civil penalties assessed under the Agency’s civil penalty
policies and governing environmental statutes.²⁶ Lastly, Part IV will pro-
vide conclusions about the wisdom and efficacy of such an administra-
tive system imposition of civil penalties.²⁷

I. EPA’S ENFORCEMENT AUTHORITIES AND PRACTICES

A. How Environmental Statutes Achieve Their Purposes

Federal environmental law has no single, uniform statutory base.
Over the last four decades, Congress has enacted numerous pieces of
legislation focusing upon a range of particular types of environmental
problems. For example, the CAA was concerned with the nation’s air
quality while the CWA focused upon the eradication of pollution in the
nation’s waters.²⁸ As a result, federal environmental law has been estab-
lished in a media-specific or problem-specific fashion and, as a conse-
quence, is a composite of a large number of statutes. These environ-
mental laws usually direct EPA to set substantive and procedural
requirements necessary for the achievement of identified environ-
mental policy goals underlying each statute.²⁹ For instance, in order to

²⁴ See infra Part I.
²⁵ See infra Part II.
²⁶ See infra Part III.
²⁷ See infra Part IV.
Act Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (codified as amended in scat-
tered sections of 42 U.S.C.).
²⁹ See, e.g., 33 U.S.C. § 1252(a) (requiring EPA to “prepare or develop comprehensive
programs” for reducing water pollution under the CWA).
meet the National Ambient Air Quality Standards (NAAQS) set under the CAA, EPA and the states must establish source-specific emission standards that limit the amount of air pollution that can be emitted.\(^\text{30}\) Agency requirements, such as these emission rules, often impose economic costs, require operational changes and/or delay activities falling under EPA’s statutory jurisdiction.\(^\text{31}\) As a result, these environmental standards may not be enthusiastically embraced by those subject to them. Not surprisingly, those falling under the EPA regulatory umbrella may find many practical reasons not to comply or not to fully comply with these rules.

As with any regulatory scheme, EPA must find ways to have its regulations followed so that the environmentally protective goals of the regulations and statutes will be realized. But how will compliance be achieved? What approach will be taken? This effort to insure regulatory compliance is generally known as enforcement.\(^\text{32}\) Two main theories of enforcement have been advocated: a deterrence-based approach and a negotiated, cooperative approach.\(^\text{33}\) Over time, and with the differing political philosophies of successive governing administrations, the relative emphasis between these two approaches can shift. Despite this observation, EPA’s enforcement system has consistently stressed deterrence-based enforcement methods using formal sanctions imposed through adversarial processes as a sign of programmatic success.\(^\text{34}\)

The central idea underlying this view is that polluters will act in an economically rational fashion and will seek to avoid the certain—and

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\(^{30}\) See, e.g., 42 U.S.C. § 7410(a)(2)(A) (stating that CAA implementation plans must include “enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable requirements of this chapter”).

\(^{31}\) See, e.g., id. § 7410(a)(2)(F). New performance standards necessary to meet environmental quality goals often require that firms construct new facilities or modify existing ones in order to meet the standards. See id. Examples of this principle are legion in the EPA environmental regulations. See, e.g., id.

\(^{32}\) Office of Enforcement, EPA, Principles of Environmental Enforcement 1-2 (1992), available at http://www.tinyurl.com/ytdj71 (defining enforcement as a “set of actions that governments or others take to achieve compliance within the regulated community”).


\(^{34}\) See Joel A. Mintz, Enforcement at the EPA: High Stakes and Hard Choices 102 (1995) (“With the brief exception . . . of the early 1980s, both the EPA’s written enforcement policies and its actual practices have consistently emphasized the initiation of formal enforcement actions against violators of federal environmental standards.”). EPA reports its annual enforcement accomplishments on its website and promotes its regulatory achievements whenever it can. 2006 Numbers at a Glance, supra note 14.
high—penalty costs of their environmentally noncompliant conduct.\textsuperscript{35} This risk avoidance will influence behavior and encourage compliance.\textsuperscript{36} In this way of thinking, EPA consistently must act to quickly identify regulatory violations and punish these transgressions in a predictable and economically onerous way. Even if EPA wishes to employ its enforcement powers in a more conciliatory or cooperative way, it must maintain the possibility of using more punitive tactics as an incentive to securing cooperation.\textsuperscript{37} This conclusion is especially true when public health and environmental quality interests are at stake. In the most environmentally threatening situations, the deterrence theory also requires that EPA have the authority to punish particularly egregious behavior with noneconomic criminal law penalties.\textsuperscript{38}

\section*{B. The Means of Assuring Compliance: The Statutory Design of Environmental Enforcement}

When designing the structure of federal environmental statutes, Congress considered enforcement to be an important component of its statutory policy. It did not establish a single enforcement method to

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\begin{itemize}
\item \textsuperscript{35} Colin S. Diver, \textit{A Theory of Regulatory Enforcement}, 28 Pub. Pol’y 257, 263 (1980) (noting that costs can include reputational injury, legal expenses, closer future regulatory oversight, and tort liability).
\item \textsuperscript{36} Id.
\item \textsuperscript{37} See id.
\item \textsuperscript{38} Id. Criminal sanctions exist within the enforcement provisions of environmental law. See Pollution Prosecution Act of 1990, Pub. L. No. 101-593, § 202(a), 104 Stat. 2954, 2962 (1990). According to EPA’s fiscal year 2006 Compliance and Enforcement data, for the five year period ending in fiscal year 2006, approximately 300 defendants were charged with criminal offenses annually. See 2006 \textit{Numbers at a Glance}, supra note 14. Within EPA is the Criminal Investigative Division that is required to be staffed with a minimum of 200 investigators. See Pollution Prosecution Act of 1990 § 202(a). “The EPA now employs 172 investigators in its Criminal Investigation Division, below the minimum of 200 agents required by the 1990 Pollution Prosecution Act, signed by President George H.W. Bush.” Solomon & Eilperin, supra note 19, at A1.
\item These investigators often work in tandem with those of other federal agencies, such as the Coast Guard and the Department of Transportation, to ferret out information that would lead to a criminal referral to the Department of Justice (DOJ). See id. A 1994 EPA guidance document instructs these investigators to concentrate on environmental violations that cause “significant environmental harm.” Memorandum from Earl E. Deveney, Director, Office of Criminal Enforcement, EPA to All EPA Employees Working in or in Support of the Criminal Enforcement Program 3 (Jan. 12, 1994), \textit{available at http://www.epa.gov/compliance/resources/policies/criminal/exercise.pdf}. If this harm occurs in conjunction with “culpable conduct” such as “repeat violations, deliberate misconduct, efforts to conceal,” or tampering with pollution monitors, then criminal prosecution is recommended. Steven P. Solow, \textit{Preventing an Environmental Violation from Becoming a Criminal Case}, NAT. RESOURCES & ENV’T., Spring 2004, at 19, 20.
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enforce the new environmental laws. With each statute enacted, Congress created a diverse array of overlapping enforcement tools. Each individual environmental statute allowed for the imposition of a range of both civil and criminal sanctions against noncompliant behavior. But that was not all. Concerned that rules might not be rigorously implemented by the government, Congress embraced a policy of diffusing environmental enforcement authority by granting it to both governmental and nongovernmental actors. In most instances, federal environmental law vests enforcement authority in state and federal governments as well as providing enforcement power to individuals and citizen groups. By expanding the range of enforcement authority, Congress intended to maximize the chances of achieving the important environmental objectives it had established.

The structure of this system of environmental enforcement has been described as a four-tier hierarchical structure. Tier one is comprised of enforcement actions taken by state, local, and tribal governments, as well as citizens organizations in state or federal court or administrative agencies. State environmental agencies and attorney general offices initiate the largest number of actions overall, and their work implements both federal and state environmental law. Tier two

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40 See William W. Buzbee, Contextual Environmental Federalism, 14 N.Y.U. Envtl. L.J. 108, 108 (2005). Congressional intent in designing such a redundant enforcement scheme was intended to provide for checks and balances in environmental enforcement so as to minimize the chances of “regulatory underkill.” Id.

41 See, e.g., 33 U.S.C. § 1319(g)(6)(B). A number of the major federal pollution control statutes actually use a cooperative federalism approach to the achievement of their statutory purposes. See, e.g., id. Cooperative federalism in the environmental context has been described in the following terms: “This arrangement—in which Congress gives EPA ultimate responsibility for program delivery but requires or authorizes EPA to vest primary responsibility with states for program implementation—is often referred to as a ‘cooperative federalism’ approach to environmental regulation.” Clifford Rechtschaffen & David L. Markell, Reinventing Environmental Enforcement & the State/Federal Relationship 15–16 (2003); see Robert V. Percival, Environmental Regulation 120–21 (3d ed. 2000).


43 Id.

44 Id. at 11; see 2 Daniel P. Selmi & Kenneth A. Manaster, State Environmental Law § 16:9–:18 (2006) (describing state administrative enforcement). Rather than supplementing federal environmental enforcement with vigorous actions, state enforcement has declined in terms of the numbers of actions. See James R. May, Now More Than Ever: Trends in Environmental Citizen Suits at 30, 10 Widener L. Rev. 1, 31 (2003) (documenting a more than forty percent decline in state administrative enforcement between 1998 and 2002). Administrative enforcement power is not uniformly distributed, and some states, including Michigan and Wisconsin, lack the authority completely. See Sue Ellen Keiner et
is composed of “federal administrative agency actions.” This highly visible form of judicial enforcement is brought by the DOJ upon referral from EPA or another federal agency and is usually reserved for more serious or complex enforcement matters. Tier three is comprised of federal criminal enforcement of environmental law, also brought upon referral to the DOJ and prosecuted by the United States in U.S. district court. This form of enforcement penalty is reserved for some of the most egregious conduct threatening environmental quality and human health. Tier four contains federal administrative agency actions taken to enforce environmental law. Administrative enforcement occurs in a number of formal and informal forms, including the issuance of notices of violation, compliance orders, abatement orders, and penalty assessment orders. It is the last of these administrative enforcement actions—penalty assessment orders—that constitutes the focus of this Article. These financial penalties frequently are


45 Cruden & Gelber, supra note 42, at 10.
46 See id. at 12.
48 Cruden & Gelber, supra note 42, at 10. Two CWA cases provide examples of the adverse health effects of water polluting discharges that led to criminal indictments. See United States v. Plaza Health Labs., Inc., 3 F.3d 643, 650 (2d Cir. 1993) (throwing hepatitis B tainted blood samples into a river found not within the CWA); United States v. Weitzenhoff, 35 F.3d 1275, 1284 (9th Cir. 1993) (dumping of waste-activated sludge into the Pacific Ocean was a knowing violation of the CWA).
49 Cruden & Gelber, supra note 42, at 10.
50 Id. While EPA is accorded principal enforcement authority under most environmental laws, other federal agencies, such as the U.S. Army Corps of Engineers, the Coast Guard, the Department of Interior, and the Department of Housing and Urban Development, possess important environmental enforcement functions as well. Id. This Article will examine the administrative penalty practice only of the EPA.
51 ENVIRONMENTAL ENFORCEMENT, supra note 8, at 83. EPA’s authority to administratively impose civil penalties did not exist when the federal environmental statutes were first enacted. Id. As Professor Joel Mintz has noted:

At the federal level, the first set of modern environmental legislation in the early 1970s granted EPA only the authority to issue administrative orders that directed recipients to comply with particular conditions and requirements. At that time, EPA lacked the authority to issue orders directly assessing penalties. In the late 1970s and 1980s, however, in an attempt to provide EPA with addi-
brought under the authority of a wide range of federal environment statutes, and they are the result of settlement agreements and administrative case decisions.\textsuperscript{52}

This four-tier array of enforcement methods represents a mix of techniques sharing the common goal of ensuring compliance with the myriad environmental rules and regulations, as well as the larger programmatic objectives underlying each environmental statute.\textsuperscript{53} While citizen suits continue to be filed, the vast majority of environmental enforcement activity is initiated by the government, rather than by citizens or environmental organizations.\textsuperscript{54} Frequently, media attention is fixed upon enforcement results from significant court judgments or settle-

\textit{Id.} In fact, in fiscal year 2006, financial civil penalties were imposed administratively in over 2650 instances. 2006 Numbers at a Glance, \textit{supra} note 14. While the agency incentives for using the administrative—non-judicial—methods of enforcement are strong, some commentators have warned of their excessive use. See, e.g., \textit{Law of Environmental Protection}, \textit{supra} note 23, at § 9:9. It has been noted that:

Over-reliance on administrative orders to the exclusion of more drastic remedies, however, softens the fiber of the regulatory program and results in the erosion of its credibility. This ultimately leads to the all too familiar pattern of a succession of orders endlessly amending and extending earlier orders. Indeed, the effectiveness of administrative orders depends upon the perception by the regulated community that the government will not hesitate to use more drastic remedies if the order is violated. Administrative orders are not self-enforcing and EPA has no contempt powers. Administrative orders can only be enforced by a court.

\textit{Id.} See Cruden & Gelber, \textit{supra} note 42, at 10.

ments imposing substantial monetary penalties and far-reaching injunctive relief.\textsuperscript{55} With this big case emphasis in the popular media and in the minds of many commentators, it is easy to lose sight of the fact that a significant amount of environmental enforcement occurs within EPA itself by way of administrative or agency penalty practice.\textsuperscript{56} It is not difficult to comprehend the reasons for this shift towards administrative enforcement: (1) reduced agency resources than are required by judicial methods; (2) EPA independence in enforcement without required coordination with the DOJ; and (3) decisionmaking by EPA’s ALJs, who are familiar with the law, regulations, and technical aspects of environmental conflicts.\textsuperscript{57} Relying upon these administrative authorities, EPA annually obtains both monetary penalties and injunctive relief in many individual cases that are decided within its own administrative judicial system staffed by EPA ALJs and by EPA’s Environmental Appeals Board (EAB or Board).\textsuperscript{58} As the statistical data below will indicate, this kind of

\textsuperscript{55} Press Release, EPA, EPA Reaches $100 Million Agreement in Olympic–Shell Pipeline Case (Dec. 11, 2002), available at http://yosemite.epa.gov/opa/admpress.nsf/4a3d7e51caf96c7a8525759003f533e/ea057914f8e03450852570cb0075e23a!OpenDocument. Examples of large penalties can be found in public announcements by EPA. See id. For instance, the Agency gave notice that it had reached a settlement against Olympia Pipeline and Shell Pipeline companies for a total of $100 million in improvements and penalties. Id. Of this amount, $36 million was composed of civil and criminal penalties. See id.; see also Lee Hancock & Matt Stiles, Foundry Admits Air Violations: Tyler Pipe to Pay $4.5 Million Fine, Gets 5 Years’ Probation, DALLAS MORNING NEWS, Mar. 23, 2005, at 5A, available at 2005 WLNR 24705219 (discussing criminal penalties under the CAA). Some studies, however, have indicated a significant decline in EPA financial penalties, including civil penalties—a twenty-five percent reduction—and criminal fines—a thirty-eight percent drop—in fiscal years 2002 through 2006 as compared to fiscal years 1996 through 2000. See Press Release, Envtl. Integrity Project, Pollution Enforcement Efforts Under the Bush Administration’s EPA Drop on Four of Five Key Fronts (May 23, 2007), available at http://www.environmentalintegrity.org/pubs/052307%20EIP%20EPA%20enforcement%20data%20news%20release%20FINAL3.pdf.

\textsuperscript{56} See Andreen, supra note 19, at 74. In fact, during the period from 1997 through 2005, a substantial decline—thirty-seven percent to forty-one percent—in EPA’s civil referrals to the DOJ for judicial enforcement was offset by a steady and significant increase in EPA’s administrative enforcement orders. Id. There have been studies documenting substantial declines in EPA’s enforcement efforts for several years. See Seth Borenstein, Fewer Polluters Punished Under Bush, Data Show, HOUSTON CHRONICLE, Dec. 9, 2003, at A2, available at 2003 WLNR 16429053 (examining seventeen categories of civil enforcement and finding reduced annual averages below both the first Bush and the Clinton administrations).

\textsuperscript{57} ENVIRONMENTAL ENFORCEMENT, supra note 8, at 79.

\textsuperscript{58} The structure of EPA’s administrative enforcement can be discerned from EPA’s rules of practice. See 40 C.F.R. §§ 22.1–52; LAW OF ENVIRONMENTAL PROTECTION, supra note 23, at § 9:5–12; Lisa, supra note 23, at 3–4. This system of agency adjudication contains both a trial level (ALJs) and an appellate level (EAB). See Lisa, supra note 23, at 8–9. Both function within an established and regulated system replete with practice manuals. See Helene Ambrosino, Handbook on Administrative Enforcement at EPA (3d ed. 2002). The
administrative enforcement is becoming increasingly common as more cases are disposed of in this low visibility, administrative fashion. The wisdom of this enhanced reliance on civil enforcement via administrative means remains an open question.

II. The EPA Administrative Enforcement Process

A. Determining Environmental Compliance

As the annual enforcement statistics indicate, the administrative enforcement of environmental statutes has “play[ed] an ever-increasing role in the EPA’s enforcement activities.”59 However, in order to fully comprehend the data reported in this Article, it is necessary to briefly describe the administrative process emphasizing its structure, decisionmaking methods, and enforcement results.60 Enforcement of environmental law also depends upon EPA’s awareness of compliant or noncompliant behavior, followed by steps taken to assure that rules will be followed.61 The mere existence of EPA environmental rules without the assurance that they are being observed would represent an empty effort. Obvious questions arise. Does the regulated firm have a necessary permit and is it meeting its performance obligations required un-

EAB decisions constitute final agency action, and, as the “consummation of the agency’s decision-making process,” they are determinative within this EPA structure. Bennett v. Spear, 520 U.S. 154, 178 (1997) (quoting Chi. & S. Air Lines, Inc. v. Waterman S.S. Corp., 335 U.S. 103, 113 (1948)). As final agency action, they may be appealed to a federal court. See id. at 177. They cannot be further appealed to the EPA Administrator. See id. Once the EAB’s decisions reach federal court, they will be reviewed to determine whether they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” under § 706(2)(A) of the Administrative Procedure Act. 5 U.S.C. §§ 551–559, 701–706, 1305, 3105, 3344, 4301, 5335, 5362, 7521, 706(2)(A) (2000). Functioning as an internal appellate body within EPA’s administrative judicial system, the EAB has issued its own Practice Manual to assist parties in the adjudicatory process. See Lisa, supra note 23, at 9.


61 See Joel A. Mintz, Some Thoughts on the Interdisciplinary Aspects of Environmental Enforcement, 36 Envtl. L. Rep. (Envtl. Law Inst.) 10,495 (July 2006) (describing the four sources of critical environmental enforcement information). At the heart of EPA’s enforcement efforts rests the availability of accurate compliance information which enables the agency to assess its success in achieving regulatory goals. Id.
der the regulatory program? Having clear and reliable answers to these questions is fundamental to the enforcement process and, ultimately, to the achievement of the underlying environmental program objectives.62

In order to determine compliance status, the Agency must acquire information concerning compliance—is the firm or individual meeting the environmental rules or violating them? Violations are identified through reports generated by EPA’s program-specific inspectors who visit and inspect regulated sites on a periodic basis. These inspectors perform their duties pursuant to EPA’s inspection guidelines. Often, they have deep experience and expertise with a number of environmental statutes, allowing them to identify violations on-site. The gathering of this compliance information stands at the center of the enforcement process and is crucial to the success of environmental regulation.

B. Deciding Whether to Enforce

When an inspection identifies a compliance issue of concern to the Agency, the inspector distributes his report to the pertinent program manager for review. The program manager and staff then determine whether the submitted inspection report has described an instance of significant noncompliance requiring an enforcement response. This program manager will also conduct “tier meetings” with both the state in which the facility is located and EPA staff. The state tier meeting will determine whether EPA or the state will initiate the enforcement action. Perhaps due to resource constraints, states frequently defer to EPA and elect to have it proceed with enforcing the violation.63 EPA may also prefer to take charge of the matter to ensure that a state-led enforcement action will not result in a settlement that

62 EPA obtains enforcement information from a variety of sources, including facility self-reporting, governmental inspections, and investigations. EPA conducted approximately 23,000 inspections in 2006. Office of Enforcement & Compliance Assurance, EPA, FY 2006 OECA Accomplishments Report 27 (2006), available at http://www.epa.gov/compliance/resources/reports/accomplishments/oeca/fy06accomplishment.pdf. This figure represents a significant increase from fiscal years 2001 and 2002, where the number of EPA inspections was approximately 17,500 per year. Id.

63 It is notable, however, that the states collectively initiate far more environmental enforcement actions than does EPA. EPA’s enforcement statistics reveal the disparity between state and federal enforcement activities. EPA records indicate that the percentage of state-led actions is often over ninety percent. Sector Notebooks Data Refresh, Compliance Assistance, US EPA, http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/data_refresh.html (follow “Five-Year Summary” hyperlink under “Enforcement and Compliance Summary for Selected Industries”) (last visited Apr. 14, 2008).
imposes lenient financial penalties and operating permit features.\textsuperscript{64} As a procedural matter, EPA cannot proceed within its own administrative enforcement system with the state as a co-plaintiff. If the state insisted in joining in the enforcement proceeding, EPA would have to proceed with a judicial enforcement action.

C. Initiating the Administrative Enforcement Process: EPA’s Complaint

If EPA and the state conclude that EPA alone will proceed with enforcement, an internal EPA tier meeting of EPA’s General Counsel and relevant Agency program heads will result in the appointment of a staff attorney to review the inspection report and to make a recommendation on whether to proceed and how. If violations have been identified, a notice of violation will be issued to the actor, informing it of the regulatory infraction and requesting compliance with the environmental rules.\textsuperscript{65} Ultimately, the General Counsel and program heads then make the final decision on whether to proceed with the matter and what form of relief should be sought. If the decision is to proceed, the previously appointed staff attorney will review the case file and draft an administrative complaint.\textsuperscript{66} The complaint is then reviewed using the same concurrence process involving the General Counsel and the program heads before it is filed.

In most instances, the complaint will make a claim for a specific dollar amount to be assessed as a civil penalty. Approximately ten per-

\textsuperscript{64} An example of this phenomena can be found in the well-known CWA citizen suit case. See generally Chesapeake Bay Found., Inc v. Gwaltney of Smithfield, Ltd., 611 F. Supp. 1542 (E.D. Va. 1985) (finding the citizen group had standing and authorizing the group to seek a civil penalty against the polluter). The federal district court found for the environmental plaintiffs and imposed a civil penalty of $1.28 million upon the defendant. \textit{Id.} at 1565. Judge Merhige reduced the maximum penalty of $6.6 million after considering adjustment factors. \textit{Id.} at 1556. However, the Commonwealth of Virginia had recovered penalties of merely $40,000 for the same violations in a case brought in state court for violations of state law. See Ann Powers, \textit{Gwaltney of Smithfield Revisited}, 23 WM. & MARY ENVTL. L. \& POL’Y REV. 557, 562–63 & n.32 (1999).

\textsuperscript{65} Even prior to the filing of EPA’s administrative complaint, EPA may engage in negotiation by sending a “show cause” letter to the alleged violator setting out the agency’s allegation and specifying a civil penalty. Telephone Interview with Michael Walker, Senior Enforcement Counsel, Office of Enforcement \& Compliance Assurance, EPA (Jan. 2008) (on file with author).

\textsuperscript{66} The complaint must contain statutory authorization supporting a factual basis for relief sought, including penalty assessed, or, when no penalty is yet assessed, a description of the severity of the violations alleged; request for Permit Action, compliance or corrective action; notice of right to a hearing; address; instructions for paying penalties; and a copy of the Consolidated Rules of Practice. 40 C.F.R § 22.14(a)(1)–(8) (2007). The complaint can also be amended or withdrawn. \textit{Id.} § 22.14(c)–(d).
cent of the time, however, complaints will state no specific penalty amount but will make a general penalty demand by setting forth the number of alleged violations and their severity. In the remaining ninety percent of cases, a penalty request is structured from penalty policies and penalty matrices based on statutory factors and EPA civil penalty guidance. It is important to note that the penalty calculation usually begins with the program personnel and not the enforcement attorney. In theory, if the consideration of the statutory and administrative penalty policies occurs at this early stage in the enforcement process, it will effectively establish the EPA's civil penalty request at a high point that will frequently be compromised in a settlement agreement or an ALJ case decision.

Although at this point there has not yet been any contact with the opposing party, once the complaint is filed, the opposing party is invited to participate in settlement discussions prior to filing its answer. Only rarely does the opposing party simply choose to pay the penalty sought in the complaint and thereby end the enforcement action. The settlement negotiations are conducted at the regional-office level by regional personnel. In most cases, parties charged in administrative complaints elect to negotiate with EPA, hoping to reach a prehearing settlement. Settlement options available to the opposing party will vary according to the allegations that have been made in the complaint, but usually the respondent and EPA discuss: (1) modifications to payment obligations; (2) whether or not to file an answer; (3) questions about underlying liability; (4) agreements on extension motions; (5) setting future settlement meetings; and, most importantly, (6) timetables for compliance if the alleged violation has not yet been corrected.

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67 Id. § 22.14(a)(4)(ii).
68 Lisa, supra note 23, at 13–14. (“When the complainant elects to make a specific penalty demand, it has been the practice of the Agency to calculate such civil penalties based upon the previously mentioned statutory factors and in accordance with civil penalty policies created by EPA.”); see Policies & Guidance, Civil Enforcement, US EPA, http://www.epa.gov/compliance/resources/policies/civil/index.html (last visited Apr. 14, 2008) (providing links to various examples of EPA penalty policies); see, e.g., Office of Enforcement & Compliance Assurance, EPA, Civil Penalty Policy for Section 311(b)(3) and Section 311(j) of the Clean Water Act 1 (1998), available at http://www.epa.gov/compliance/resources/policies/civil/cwa/311pen.pdf.
69 See 40 C.F.R. § 22.18(b)–(c); see also Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties Issuance of Compliance or Corrective Action Order and the Revocation, Termination, or Suspension of Permits, 64 Fed. Reg. 40,138, 40,157 (July 23, 1999) (to be codified at 40 C.F.R. pt. 22) (discussing proposed rules to the settlement process).
Frequently, negotiated settlements include features that are not exclusively civil fines, but rather, agreements to take other environmentally beneficial actions in order to mitigate the cash penalties initially assessed. These settlement tools are called Supplemental Environmental Projects (SEPs) and, if undertaken by the respondent, could result in a reduction of the initial penalty assessment. The range of potential SEPs is quite broad. For example, for an Emergency Planning and Citizen Right-to-Know Act violation, the opposing party could offer to utilize substitute chemicals in its processes that are not statutorily within the jurisdiction of EPA. SEPs could also include easements for open space and accompanying land trust conveyances for RCRA violations, or purchasing hybrid busses for significant CAA violations. SEPs are commonly used as components of EPA settlements and are subject to Agency policy. While EPA cannot specifically propose that a company implement a SEP, nor propose what SEP might be acceptable, EPA can direct the party to a “SEP Idea Bank” for ideas.

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70 Environmental Enforcement, supra note 8, at 150. EPA is now increasingly using the SEP device as a part of its settlements. Professor Mintz has noted that in fiscal year 2006, EPA settled 220 cases requiring defendants to implement SEPs. See id. In its policy on SEPs, EPA sets out categories of supplemental projects that may be undertaken. Memorandum from Steven A. Herman, Assistant Adm’r, EPA, to Reg’l Adm’rs 7–11 (Apr. 10, 1998).

71 See id. at 9.

72 See id. at 10–11.

73 See id. at 9.


75 EPA’s website provides information on the Agency’s SEP policy, SEP characteristics, and categories of acceptable SEPs. See SEPs, Civil Enforcement, Compliance and Enforcement, US EPA, http://www.epa.gov/compliance/civil/seps/index.html (last visited Apr. 14, 2008). The six jurisdictions in the mid-Atlantic Region III have established a SEP Idea Bank and Index. See SEP Idea Bank, Mid-Atlantic Enforcement, US EPA, http://www.epa.gov/Region3/enforcement/sepbank.htm (last visited Apr. 14, 2008). SEPs can warrant a 100% credit to the gravity component of a penalty, although generally the credits fall in the range of sixty to eighty percent of the penalty proposed. See Memorandum from Steven A. Herman, supra note 70, at 22. No SEP credit is available for any penalty based upon economic benefit. Id. at 12.
If the parties reach an agreement, EPA will draft a Consent Agreement/Final Order (CAFO).76 The CAFO will generally contain both an outline of the settlement and a separate “conditions” document attachment.77 It becomes final when approved by the Regional Judicial Officer (RJO) or Regional Administrator in the EPA region, since the RJOs serve as “Presiding Officers” in a Part 22 proceeding until an answer is filed by a respondent and the case is forwarded to the Agency’s Office of Administrative Law Judges.78 With this agreement and receipt of payment of the penalty, the regional official issues a Final Order ending the enforcement case.79 Up to this point, the administrative enforcement proceeding has been conducted by EPA’s regional officials as a process of negotiation and prehearing settlement. If settlement is not possible, the filing of the respondent’s answer to EPA’s complaint starts the adjudicatory hearing process.80

D. After the Complaint: Respondent’s Answer and Prehearing Alternative Dispute Resolution

Although the parties may continue to negotiate, the administrative hearing process formally begins when the respondent files an answer to EPA’s administrative complaint.81 In practice, the answer generally mirrors EPA’s complaint paragraph-by-paragraph. EPA considers a response of “lacks sufficient information,” however, as the functional equivalent of a denial.82 Once the answer is filed, EPA’s Office of Administrative Law Judges obtains jurisdiction over the action.83 At the
outset, the parties will have an opportunity to participate in Alternative Dispute Resolution (ADR) or ADR arbitration methods to resolve the dispute. There are two main forms of ADR available: (1) party-initiated ADR and (2) EPA ALJ mediation. The chief ALJ will offer the parties an opportunity to participate in ADR or ADR arbitration methods, which are usually conducted by a retired ALJ or an ALJ who will not thereafter preside at the hearing should the ADR process fail to resolve the matter. ADR is offered automatically and respondents almost always accept the offer since doing so delays the forward momentum of the administrative case and removes the case from the active docket. The arbitration session usually is conducted by telephone and the ALJ arbitrator frequently will comment individually to the strength or weakness of the respective parties’ positions. If this arbitration is successful, the arbitrator will report this result to the head ALJ who subsequently will issue a letter to the parties instructing them that they have thirty days to file the CAFO that formally terminates the administrative charge. If they do so, the matter ends without further hearing and decision.

If the ADR arbitration is not successful in resolving the controversy, the matter proceeds on a fast track towards an administrative hearing. Within approximately six months of filing the complaint, EPA is required to undertake its prehearing information exchange. At the same time, an EPA ALJ is assigned to preside over the case. The information exchange, with certain exceptions, establishes the exclusive list of documents, exhibits, and witnesses that may be considered or


84 Lisa, supra note 23, at 37–38.


88 The powers and duties of an ALJ are subject to the published EPA rules, and they preside subject to rules set forth at 40 C.F.R. § 22.4(c). These powers are quite extensive. Id. The ALJ is responsible for conducting the formal proceeding, interpreting the law, and applying agency regulations and policies in the course of an administrative adjudication. Id. They are EPA employees, but in order to assure their independence, ALJs are not subject to agency personnel evaluation or sanctions and their compensation is set by the federal Office of Personnel Management, an independent agency. See 5 C.F.R. § 950.205(a). EPA can take disciplinary action against an ALJ only for good cause and before the federal Merit Systems Protection Board. Id. § 950.211(a).
heard in the administrative hearing. This process structures the hearing around a predetermined evidentiary base. If any further discovery beyond the prehearing exchange is considered to be necessary, EPA must file a motion to compel discovery. At this point in the proceeding the respondent must exchange its relevant information too, and EPA has an opportunity to object to documents contained therein. This phase is important in the hearing process: since the parties are bound by the pre-hearing process, no additional information may be offered at the hearing that was not already produced. The Part 22 regulations specifically set forth the nature of the information required for the prehearing exchange, and they take special note of penalty information by requiring EPA to explain and justify its penalty request. If EPA’s complaint sets forth a specific penalty amount, the Part 22 rules require that the complainant, EPA, “shall explain . . . how the proposed penalty was calculated in accordance with any criteria set forth in the Act.” If EPA has elected to plead generally without specifying a penalty amount, Part 22 requires that the complainant’s prehearing information exchange must set forth all the facts that it believes are relevant to the calculation of a penalty for respondent’s alleged violations. In this case, EPA must file a specific penalty amount within fifteen days of the respondent’s prehearing exchange filing, along with an explanation of the penalty calculation. Similarly, the respondent must then supplement its prehearing exchange with any arguments it plans to present to justify reduction or elimination of the proposed penalty.

These procedural requirements suggest that the issue of the size of the administrative penalty sought by EPA is one that requires early disclosure and that EPA must justify its request in its administrative pleadings. These rules also reflect a desire to tie specific remedial requests to statutory penalty factors or existing EPA penalty policies rather than random, exorbitant figures. Certainly, the Agency’s stated policy in its

89 40 C.F.R. § 22.19(a).
90 See id.
92 40 C.F.R. § 22.19(a)(1). Information required in the prehearing exchange that is not submitted shall not be admitted into evidence at hearing, except as provided in 40 C.F.R. § 22.22(a). Id.
93 Id. § 22.19(a)(3).
94 Id.
95 Id. § 22.19(a)(4).
96 Id.
97 Id. § 22.19(a)(3).
own rules has been to impose a disciplined method of decisionmaking for its enforcement personnel to use in explaining how they arrived at their civil penalties.

E. Securing Settlements Prior to Hearing

The administrative penalty process is extremely successful in securing settlements prior to the hearing. Prehearing ADR and other settlement negotiation will usually dispose of ninety percent of the filed cases through the CAFO settlement technique. As a result, only about ten percent of the filed cases, or several hundred per year, actually move forward to the administrative hearing. These contested cases usually are characterized by large dollar penalty amounts, high capital expenditures required to come into compliance, or, more rarely, a point of law needing interpretation. This ten percent slice of filed cases is overwhelmingly heard not on questions of basic liability, but rather in order to contest the penalty calculation contained in EPA’s complaint. Most of the liability questions are resolved by a prehearing Motion for Accelerated Decision, a form of administrative summary judgment. To the extent that the underlying liability is still contested at the hearing, however, EPA must present its prima facie case, and the respondent is then accorded an opportunity to present its defenses. EPA may prevail only if it proves every contested issue by a preponderance of the evidence.

Once liability is found, the proceeding moves to its second stage, the penalty determination. This bifurcated process sets the penalty in the form of a written opinion rendered after the hearing. During the penalty phase of the hearing, EPA presents evidence on how its penalty policy should apply to the case at hand. The principal EPA witness on this issue is the program person who originally calculated the proposed penalty. To buttress its penalty arguments, EPA will also present evidence on administrative penalties previously ordered for respondents having been found to have committed comparable violations. This evidence will attempt to establish a penalty norm for the ALJ to follow. After EPA presents its penalty case, the respondents will then present their response, raising such issues as the inability to pay or to continue in business. Both respondents and EPA remain bound to the penalty-related information

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98 See 40 C.F.R. § 22.20(a). The Motion for Accelerated Decision may be granted at any time by the Presiding Officer to either party if there is no issue of material fact and a party is entitled to judgment as a matter of law. Id. In addition, it can be granted to the respondent if EPA has failed to establish a prima facie case. Id.

99 Id. § 22.24(a).

100 Id. § 22.24(b).
produced during the prehearing information exchange. When the amount of penalty is high enough respondents will present testimony from outside economic experts to reinforce their case.

F. Reaching Decision in the Administrative Hearing

ALJs do not rule from the bench, but rather provide the parties with a period of time to prepare and submit briefs after the hearing.\(^{101}\) After receiving the briefs, a written ruling is issued by the ALJ.\(^{102}\) Despite its nonjudicial, administrative nature, this entire process is not an expeditious one for either EPA or the party charged with the violation. For those few cases that are not settled, case resolution usually takes between eighteen and twenty-four months to move from facility inspection to the ALJ’s written opinion. Furthermore, the process need not end here since appeal may be taken to EPA’s EAB and this could further extend the decisionmaking time period.\(^{103}\) In practice, these appeals almost always are initiated by respondent. Under EPA’s Part 22 rules, the EAB serves as the final Agency decisionmaker for administrative penalty actions.\(^{104}\) As such, the EAB is “responsible for assuring consistency in Agency adjudications by all of the ALJs and RJOs.”\(^{105}\) The scope of the EAB review is limited to those issues raised during the administrative proceeding and the Initial Decision, matters as to subject matter jurisdiction, and anything additional the EAB decides should be included.\(^{106}\) As the data below reveals, very few cases make it to the EAB for administrative appellate review, and the EAB does not appear to exert much supervisory influence to assure consistency or conformity with EPA rules. Theoretically, an EAB decision could be appealed to the federal courts for further review.\(^{107}\)

\(^{101}\) Id. § 22.26.

\(^{102}\) See id. § 22.27(a).

\(^{103}\) Id.

\(^{104}\) See 40 C.F.R. § 22.4(a); Nancy B. Firestone, The Environmental Protection Agency’s Environmental Appeals Board, 1 Env’tl L. 1, 1 (1994); William A. Tilleman, Environmental Appeal Boards: A Comparative Look at the United States, Canada, and England, 21 Colum. J. Env’tl L. 1, 3 (1996). After Post-Hearing Briefs have been submitted summarizing the evidence presented at hearing and the legal positions of the parties, the Presiding Officer will issue a written ruling, called an Initial Decision, in which the Presiding Officer makes findings of fact, draws conclusions of law, and, when appropriate, imposes some form of relief to address a respondent’s violations. 40 C.F.R. § 22.27(a).


\(^{106}\) 40 C.F.R. § 22.30(c).

\(^{107}\) See id. § 23.12. In the few judicial review cases that examine administratively assessed civil penalties, EPA penalties have been accorded great deference upon later court review and are usually tested under an abuse of discretion standard. See Pepperell Assocs. v.
III. **Empirical Examination of EPA’s Administrative Civil Penalty Practices**

A. **Collecting Data Concerning EPA Administrative Penalties**

This Article analyzes administrative enforcement data derived from EPA reports over the five year period spanning from 1999 to 2004. There has been very little scholarly attention given to administrative enforcement sanctions and extremely little consideration of the impact of the ALJ system of decisionmaking on civil penalties suggested by EPA enforcement officials. In fact, EPA provides no public information on the subject of administrative enforcement besides annual totals and the value of the penalties imposed.\(^{108}\) The principal purposes of the research in this Article were to examine EPA’s assessment of civil or financial penalties through this administrative enforcement mechanism and to determine the extent to which statutory and agency penalty policies affected the actual imposition of financial penalties. More generally, this research is intended to examine how EPA handles the discretion that it has in the imposition of civil penalties. The main objectives of this work are to address three tasks:

1. To evaluate the civil penalty assessment process in the first instance by identifying the initially proposed penalty amounts as reported in the administrative decisionmakers’ opinions and compare them to the final penalties actually assessed (the Start/Finish comparison);

2. To ascertain the frequency with which administrative decisionmakers alter EPA’s proposed penalties and determine which of the statutory adjustment factors identified in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), TSCA, CAA, CWA, RCRA, and EPA penalty policies, if any, are utilized in making those adjustments; and

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\(^{108}\) See ENVTL. INTEGRITY PROJECT, supra note 16, at 10 app.I. Often, those statistics are criticized as being unduly inflated by EPA by the inclusion of amnesty agreements and default judgments that are unlikely to be collected. See id. at 6.
(3) To determine which of the statutory and EPA adjustment factors is most commonly cited in case decisions that make civil penalty adjustments upwards or downwards.

B. EPA’s Administrative Enforcement System: Points of Termination

The administrative enforcement system is an enforcement process that is comprised of a number of steps. After a matter is set for enforcement by EPA regional officials, it can be terminated in a number of different fashions. The discussion below outlines the four principal ways in which an administrative enforcement action can end. These steps are important to properly understand in order to put the following empirical results into perspective. In addition, the data collected for this research uses the labels set forth in the subsections that follow.

1. The CAFO

The CAFO is developed when the parties to an enforcement case settle a matter. It is a two-part document consisting of a Consent Agreement and Final Order. The Consent Agreement sets forth the specific terms and conditions of the settlement and includes: the amount and terms of payment of any penalty; a statement by respondent admitting the jurisdictional allegations of the complaint; a waiver by respondent of its right to appeal the CAFO; terms of compliance or corrective action tasks to be performed by the respondent; terms and conditions of any SEPs; releases of liability; and reservations of rights or authorities for the complainant. As its name suggests, the Consent Agreement comprises the terms of the settlement between the government and the charged party. It contains the amount of any civil penalty imposed under the Agreement and the parties’ consent to the assessment of any stated civil penalty. The Consent Agreement does not terminate the proceeding by itself. The conclusion comes when the EPA regional official or the EAB headquarters issues a Final Order.

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110 See id. §§ 22.17–.20, 22.31–.32.
111 Id. § 22.18(b)(2).
112 Id.
113 See id.
114 See id.
115 40 C.F.R. § 22.18(b)(3).
116 See id.
in the case. The Final Order serves as the final Agency action in the proceeding and it ratifies the settlement terms set forth in the Consent Agreement. Actually, the party’s liability for civil penalties for the charged offenses is finally resolved only when EPA receives “full payment” for any violations of law. The release is final when the check clears.

2. Default Orders

Default Orders address “failure [of a respondent] to file a timely answer to the complaint; upon failure to comply with the information exchange requirements of § 22.19(a) or an order of the Presiding Officer; or upon failure to appear at a conference or hearing.” The central idea is that a charged party may be considered to be in default under each of the stated scenarios and that a Default Order may terminate the proceeding. Most civil litigation systems contain similar provisions in their rule structures. Under the EPA rules, “[w]hen the Presiding Officer finds that default has occurred, he shall issue a [D]efault [O]rder against the defaulting party as to any or all parts of the proceeding,” unless the record indicates a “good cause” rationale why a Default Order should not be issued. In the usual case, the matter is ended with the Default Order and the recommended penalties become part of the order.

3. The Initial Decision

The Initial Decision is the judgment issued by the ALJ following the full administrative hearing and after the period reserved for filing briefs. Not surprisingly, it includes findings of fact, conclusions of law or discretion, recommended civil penalty assessments, if appropriate, and a corrective action order or compliance order. The EPA Part 22

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117 See id.
118 Id.
119 Id. § 22.18(c).
120 Id. § 22.17(a).
121 40 C.F.R. § 22.17(a).
123 40 C.F.R. § 22.17(c).
124 Id. § 22.17(d).
125 Id.
126 Id.
rules require that the penalty decision be explained in the ALJ’s Initial Decision and state that the amount of the civil penalty be determined based on “evidence in the record” and in accordance with “any penalty criteria set forth in the Act.” The rules explicitly direct the decisionmaker to “explain in detail ... how the penalty to be assessed corresponds to any [statutory] penalty criteria.” Significantly, if the Initial Decision sets the civil penalty at an amount different from that proposed by EPA, this discrepancy must be explained with specific reasons given for an increase or decrease. The drafters of the rule intended that the Initial Decision explain in writing the penalty calculation before making it final. The Initial Decision automatically becomes a Final Order within forty-five days unless the respondent: (1) moves to reopen the hearing; (2) files an appeal to the EAB; (3) files a motion to set aside a default order; or (4) the EAB elects to review the matter on its own accord. If none of these steps are taken, the Initial Decision becomes final and, the respondent waives its right to have a court review the decision.

4. Final Orders

The Initial Decision will become a Final Order if none of the motions or appeals mentioned above are granted. However, the EAB maintains an independent right to review these ALJ Initial Decisions on “its own initiative.” From the statistics discussed in Part III of this Article, this prerogative is infrequently exercised. When the EAB elects to review the determination, however, it will review the entire record de novo and will issue a final decision that either “shall adopt, modify, or set aside the findings of fact and conclusions of law or discre-

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127 Id. § 22.27(b).
128 Id.
129 40 C.F.R. § 22.27(b); see Lisa, supra note 23, at 43 (“[A] Presiding Officer is required to consider any Agency penalty policies that are applicable to the case, but is not required to follow these policies in calculating a penalty as long as an adequate explanation as to the deviation from the policies is provided.”).
130 40 C.F.R. § 22.27 (a)-(b).
131 Id. § 22.27(c) (1)-(4); see also id. §§ 22.28(a) (motion to reopen a hearing), 22.30(b) (review initiated by the EAB).
132 Id. § 22.27(d). Appealing the decision through the EAB preserves that right, although the data fail to identify many instances of the parties choosing to do so. Id.
133 Id. § 22.31.
134 Id. § 22.27(c) (4).
135 See discussion infra Part III.
136 See discussion infra Part III.D.
tion contained in the decision.” Although the EAB makes a de novo review of penalty determinations, “[T]he Board generally will not substitute its judgment for that of the presiding officer absent a showing that the presiding officer has committed an abuse of discretion or a clear error in assessing the penalty.” The Part 22 rules indicate that a penalty will be scrutinized in cases where the ALJ has chosen not to apply EPA’s penalty policies or the penalty assessed falls outside the range of penalties provided for by such policies. In these cases, the EAB “will closely scrutinize the ALJ’s reasons for choosing not to apply the policy to determine [whether the reasons] are compelling.” From the language used in these EPA rules, it would seem that the EAB intended to supervise ALJ civil penalties and to enforce the EPA’s guidance and statutory directives on penalty design. While some EAB precedent suggests that the EPA penalty policies are merely suggestive and not binding on the ALJ, a number of cases have reversed ALJ penalty decisions when they departed from the result that would have been obtained from application of the policy. The small number of penalty cases actually reaching the EAB indicates that the exercise of this supervisory function is occasional at best.

137 40 C.F.R § 22.30(f).
139 See 40 C.F.R. § 22.27(b).
140 Chem. Lab Prod., Inc., 10 E.A.D. 711, 725 (2002) (quoting M.A. Bruder & Sons, 10 E.A.D. at 613). Compare Chem. Lab Prod., Inc., 10 E.A.D. at 734 (holding that reasons for not applying agency penalty policies were not compelling), and M.A. Bruder & Sons, 10 E.A.D. at 612–13 (finding that ALJ’s reasons for departing from the penalty policy was not compelling), with Ray Birnbaum Scrap Yard, 5 E.A.D. 120, 124 (1994) (finding the Presiding Officer’s rationale for deviating from penalty guidelines compelling).
141 40 C.F.R. § 22.30(f).
142 See, e.g., Employers Ins. of Wausau, 6 E.A.D. 735, 758 (1997).
143 See, e.g., Carroll Oil Co., 10 E.A.D. at 661; M.A. Bruder & Sons, 10 E.A.D. at 616; Advanced Elec., Inc., 10 E.A.D. at 415.
144 See discussion infra Part III.D.
C. Sampling Strategy and Methodology

The central purpose of this research was to examine administrative enforcement civil penalty results in actual cases. To find reports of these administrative decisions, the research employed the Lexis EPA Administrative Materials Combined database.\(^{145}\) The analysis was limited by searching only those decisions issued between August 1, 1999 and November 11, 2004, in order to coincide with the newly revised and promulgated Part 22 regulations issued in July of 1999.\(^{146}\) As stated above, these rules required that ALJs and other decisionmakers carefully explain their civil penalties and conform to EPA guidance and statutory directions.\(^{147}\) The five-year period that the research covered

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\(^{145}\) This database contains EPA ALJ Decisions, EPA EAB decisions, EPA General Counsel Memoranda, EPA RJO Decisions, and EPA Title V Air Permit Orders. Because the analysis primarily focused on administrative adjudications, this database was considered to be most appropriate for the research.

\(^{146}\) Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits, 40 C.F.R. pt. 22.


In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require.

also spanned two presidential administrations of different political parties in an attempt to identify long-term trends unaffected by short-term political goals. The analysis focused on five environmental regulatory statutes that were considered to be fairly representative of administrative enforcement actions across the range of environmental law. With this outlook, the data collection proceeded.

The initial search efforts attempted to find ways to eliminate extraneous orders and motions from the large sample of administrative case decisions, numbering approximately 1100 for the five statutes combined. The main focus was to concentrate on those decisions discussing the issue of civil penalties and, more specifically, those explaining how the proposed penalties were adjusted upwards or downwards by the ALJs. The decisions in the sample were classified as motion orders, Default Orders, CAFOs, Initial Decisions, or Final Orders. These cases were then evaluated on the basis of whether they contained any discussion of penalty calculation. Those decisions likely to contain considerations of adjustment factors were identified as “relevant” and separate lists of relevant decisions for each statute were generated and analyzed.\(^{148}\)

The large list of approximately 1000 decisions quickly shrunk. Of the total decisions under the CAA, TSCA, FIFRA, CWA, and RCRA for the time period under study, 597 were CAFOs, 246 constituted “other” orders and motion orders, and the remaining 190 were considered to be relevant decisions because they contained civil penalties. Relevant decisions were defined as those where a final disposition of the penalty issue was addressed in an adjudicated setting; in other words, anything not a Consent Agreement or Final Order.\(^ {149}\) The chart below reflects these total numbers.

\(^{148}\) The methodology used for the majority of the analysis was generated using tools available in Microsoft Access and Microsoft Excel, specifically the report generation and pivot table functions. This analysis was conducted for the entire 389 case sample and for the 191 non-CAFO case sample as well.

\(^{149}\) Each of the five statutes’ penalty assessment sections were analyzed to ascertain what statutory factors the Presiding Officer was required to consider in assessing a final penalty for each violation. Importantly, a single researcher checked each of the cases to ensure consistency in data collection and overall accuracy of reporting. A report was generated for each case containing the entire information collected for the record.
From these decisions, the cases were broken down into two categories: (1) CAFOs with civil penalties imposed and (2) relevant ALJ decisions with civil penalties imposed. The final case sample contained a total of 389 decisions, including 198 CAFOs and 191 cases considered relevant for the purposes of this research. The Consent Agreement cases contained some discussion of penalty issues. The relevant ALJ cases were the main focus of the research analysis, in the hopes they would reveal the ALJs’ methods for constructing civil penalties in actual administrative case decisions.

As the numbers indicate, over half of the case resolutions were by way of CAFO settlement agreements.150 This large proportion should have been expected since many cases were settled for relatively small amounts of money, perhaps less than the cost of contesting the EPA charge.151 While these CAFO terminations were numerous, they often would not specify a penalty calculation method, and they represent compromise at the regional office level and not the full decision of an ALJ. Once these CAFOs were eliminated from the total of 389 cases, the research concentrated on the remaining 191 ALJ penalty decisions.

Table 2: Total number of cases by statute represented in the sample analyzed

<table>
<thead>
<tr>
<th>Type of Decision</th>
<th>TSCA</th>
<th>FIFRA</th>
<th>CWA</th>
<th>CAA</th>
<th>RCRA</th>
<th>Multi-Media</th>
<th>Grand Total</th>
</tr>
</thead>
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<td>37</td>
<td>65</td>
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<td>6</td>
<td>198</td>
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<td>9</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>45</td>
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<tr>
<td>Initial Decision</td>
<td>6</td>
<td>13</td>
<td>25</td>
<td>20</td>
<td>11</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Initial Decision/Default Order</td>
<td>14</td>
<td>12</td>
<td>5</td>
<td>11</td>
<td>7</td>
<td>49</td>
<td></td>
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<tr>
<td>Other</td>
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<td>3</td>
<td>9</td>
<td>1</td>
<td>2</td>
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<tr>
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<td>58</td>
<td>83</td>
<td>115</td>
<td>27</td>
<td>8</td>
<td>389</td>
</tr>
</tbody>
</table>

150 See infra tbl.2.
151 See Envtl. Integrity Project, supra note 16, at 10 app.I (presenting amnesty agreements with nominal $500 civil penalties).
D. **Observations Derived from the Data**

1. **Comparison Between Proposed Initial Penalties and Final Assessed Penalties (the Start/Finish Comparison)**

   One interesting question addressed by the research was how successful EPA was in actually imposing the civil penalty that had been initially recommended by the regional enforcement officials in their administrative complaint. This inquiry was termed the “start/finish comparison” and it reflects the degree of *discount* that ALJs and other decisionmakers made from the initial EPA penalty demand. Considering all 389 cases in the large sample mentioned above, EPA’s administrative complaints had proposed approximately $24 million in civil penalties, while the final penalties assessed amounted to approximately $13.4 million. This amounted to a rather sizable 44% reduction in the start/finish comparison. Curiously, within this sample of cases, those that terminated with an early CAFO resulted in a 29% reduction over the administrative complaint request, while those that were imposed following an Initial Decision resulted in a 52% reduction. This result suggests that, in the aggregate, it was more beneficial to contest the administrative complaint through EPA’s ALJ system if the costs of doing so were less than the saved penalty. Successfully contesting the EPA-proposed penalty would result in an additional 23% discount off of the proposed amount. However, as the data indicates, the penalty amounts are relatively small and the cost savings derived from successfully contesting EPA’s penalty might not be worth the effort.\(^{152}\)

2. **Examining the Start/Finish Comparison in Relevant or Contested Administrative Penalty Cases**

   When the contested—or nonsettled—penalty-imposing cases became the focus of the analysis, several interesting questions emerged. First, of these 191 relevant cases, what was the impact of the administrative proceeding on the penalty amount that had been initially proposed in EPA’s complaint? Was it increased, decreased, or left at the requested amount? When considering the case decisions in this sample, 5% resulted in an increase in the penalty initially proposed, 53% resulted in no change, and 42% resulted in a decrease in the penalty from the one initially proposed. This important data reveals that, for the most part,

\(^{152}\) The author compiled this data from several databases.
contesting the proposed civil penalty held little danger of having the ALJ or the EAB increase the initially proposed penalty. On the other hand, removing the small number of penalty increases from consideration, the statistics reveal that by contesting the case, the charged party has a 56% chance of having the penalty proposed in EPA’s complaint affirmed unchanged, while having a 44% chance of having the civil penalty reduced. Perhaps the small dollar amount of the proposed civil penalties kept the contested case count down and the number of CAFO settlements up.

Second, of the small number of penalty increases in the sample, a defendant was four times as likely to have the penalty increased by the EAB than by an ALJ. In most of these upward-adjustment cases, the EAB was persuaded by EPA counsel that the ALJ had unreasonably lowered the initial penalty amount set forth in the administrative complaint. This result suggests that there was some risk—though not great—of appealing an ALJ-issued penalty award to the EAB. Other evidence collected supports the idea that the ALJs regularly ruled in favor of defendants in civil penalty cases. In two out of three contested cases in the sample, ALJs decreased the initially proposed penalty, while in one in three cases, they did not change the recommended penalty. This would suggest that the ALJs were persuaded by the defendants’ arguments that the proposed penalty was excessive or unjustified.

In the cases that were appealed to the EAB, there was a 50% chance of decreasing the penalty imposed in the proceeding below, and this percentage was somewhat lower than the comparable figure for ALJ decisions. This statistic suggests that the EAB considers it to be its role to correct erroneous ALJ decisions and adjust the civil penalties downward as well as upward in cases reaching them.

Third, in terms of the amount of money involved in the relevant cases, the average penalty increase was $8904, while the average penalty decrease was $96,000.\textsuperscript{153} This ten-fold imbalance in amount should be considered in light of the fact that there were nearly ten times as many downward adjustments made as upward adjustments. With this much

\textsuperscript{153} Even excluding the smallest downward penalty change, $365, and the largest downward adjustment, $1.7 million, the average decrease was approximately $72,000. This amount exceeds the amount reported for the larger sample of 191 contested cases. The probable explanation for this fact is that the 122 contested cases in this relevant case category might represent matters with higher initially proposed penalties, since they resulted in full ALJ case decisions, complete with a penalty calculus. Perhaps the other sixty-nine cases involved considerably less money, which would clarify why the ALJ did not explain the final penalty assessed.
money at stake, and with the odds of winning a downward penalty adjustment, it is surprising that more cases are not contested. Perhaps the CAFOs obtain similar penalty reductions without the expense and inconvenience of contesting the charge. Also, there is a greater chance that challenging the initial penalty that EPA has proposed will be unsuccessful and that, in the end, the ALJ will impose a penalty unchanged from the amount requested by EPA.

Fourth, an examination of the civil penalty adjustments made by ALJs reveals unevenness in the distribution of the adjustments across the five statutes studied. Since the upward adjustments were so few, there was no clear difference in the small numbers involved. When comparing the no change results with the decrease or downward adjustments, however, interesting patterns emerged. The following illustrates the percentage of no change cases with the percentage of decrease cases in terms of the penalties imposed by ALJs, arranged by statute:

- CAA (47.5%/47.5%);
- FIFRA (71%/29%);
- RCRA (41%/50%);
- TSCA (81%/19%);
- CWA (27%/66%).

While there was an even chance of penalty decrease or no change in the CAA, with RCRA (50%), and the CWA (66%), there was an even or better chance of penalty reduction. In the FIFRA (71%) and TSCA (81%) cases, the odds were in favor of no change in the proposed penalty amount, suggesting that challenging the initial penalty figure was a long shot at best. There is no obvious explanation for this discrepancy between statutes. The lesson that this data provides is that the chances of a downward civil penalty adjustment are much greater with the CAA, RCRA, and the CWA than with FIFRA and TSCA. It is unclear why there would consistently be erroneous, high civil penalty demands by EPA, but that the FIFRA and TSCA penalty requests would be more accurate and legally defensible.

3. How Frequently Is the Civil Penalty Calculation Explained?

a. Providing a Civil Penalty Explanation: Overall Statistics

Analyzing the 191 case decisions that imposed administrative civil penalties, the opinions reflect an uneven degree of attention to the need for explanation of how the penalty was determined. All in all, the research determined that only 122 of the 191 penalty-imposing deci-
sions in the sample actually contained any explanation of penalty setting as clearly required by the EPA Part 22 rules. This represented an overall 64% compliance rate with this clear procedural mandate. In the other 36% of the penalty-imposing case decisions, EPA’s administrative enforcement system provided no explanation for its final penalty.\textsuperscript{154} The surprising conclusion derived from this data was that EPA’s administrative enforcement system regularly ignored provisions of the Agency’s own rules in the implementation of its penalty process. With little public oversight of this internal Agency process and little objection to the actual civil penalties imposed by it, there appears to be little or no incentive for EPA to enforce its own rules against itself.

When broken down by level in the administrative enforcement system, the frequency of penalty explanations also varied to a significant extent. Interestingly, 72% of the ALJ-written opinions contained discussions of penalty design and calculation. This figure reflects the fact that a relatively high level of compliance with the Part 22 direction had been achieved in ALJ practice.\textsuperscript{155} That being said, 28% of the ALJ case decisions omitted this required element. When the analysis shifted to the decisions of the EPA EAB, the percentage of opinions containing a penalty discussion actually fell to 52% of the decisions in the sample. Finally, 57% of decisions made at the regional level by a RJO explained the penalty results. The overall statistics reveal a striking lack of compliance with the explicit mandate of the Part 22 rules.\textsuperscript{156} Apparently, the case decisionmakers often impose a financial penalty, but they do not justify it with any consideration of the statutory or administrative penalty adjustment factors.

b. Following the EPA Penalty Policy or Guidance

Examination of the subset of the 122 case decisions where some explanation of the civil penalty’s calculation was given presented a number of interesting patterns. First, in these cases the frequency of explicitly applying the statutory or EPA penalty policy varied greatly

\textsuperscript{154} If the 198 penalty-imposing CAFO settlements are considered separately, these decisions provided a calculation method only forty-two percent of the time. This is significantly less than the rate of explanation in the contested decisions, which had an overall explanation rate of sixty-four percent.

\textsuperscript{155} See 40 C.F.R. § 22.27(b) (2007) (“The Presiding Officer shall consider any civil penalty guidelines issued under the Act. The Presiding Officer shall explain in detail in the [I]nitial [D]ecision how the penalty to be assessed corresponds to any penalty criteria set forth in the Act.”).

\textsuperscript{156} See id.
across the five environmental statutes being studied: CAA (31%), FFRA (58%), RCRA (71%), TSCA (59%), and CWA (13%). In all of these cases some explanation was provided, just not one that referenced the relevant penalty policy. It is not exactly clear why such a discrepancy exists among the five statutes.

4. What Adjustment Factors Affect Penalty Design?

Environmental statutes authorize enforcement actions and set maximum penalties allowed per violation under each statute. This consistent statutory approach ensures that EPA will have a high potential ceiling on the amount of civil penalties that it could seek to impose on those violating environmental standards in both administrative and judicial enforcement contexts. Since these statutes frame penalty liability in terms of numbers of violations multiplied by the number of days of violation, the potential maximum for fines that might be charged under the law is extremely high. In order to provide some guidance to EPA and the federal courts on how to exercise discretion in the choice of civil penalties under the maximum amounts, Congress provided a short list of statutory factors that should be considered in the design of a civil penalty. Two main themes reflected in this legislative approach are deterrence and the denial of economic advantage to those who violate environmental law. Using the CWA § 1319(d) as an example, the following six factors were identified in the law for calibrating penalties:

In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the ap-

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158 Identifying the violations and determining the duration of the violations are crucial steps in establishing the maximum possible penalty under the law. After March 15, 2004, the maximum penalty per day of violation was increased to $32,500, creating the possibility of a $11,862,500 penalty for a violation lasting one year. Should there be multiple violations, the maximum penalty could rise by tens of millions of dollars.

159 See Tull v. United States, 481 U.S. 412, 422–23 (1987) (finding the nature of civil penalties to include punitive elements, such as deterrence and retribution, as well as elements of recovery of unfair economic advantage gained by noncompliance).
ducible requirements, the economic impact of the penalty on
the violator, and such other matters as justice may require.\textsuperscript{160}

Other statutes contain similar factors within the terms of enforcement
authority.\textsuperscript{161} These statutory adjustment factor provisions were intended
to influence both the prosecutorial discretion of enforcement officials
in fashioning their penalty requests and the civil penalties actually
imposed by federal courts and administrative decisionmakers. Like the
sentencing guidelines in federal criminal law, the adjustment factors
attempt, in a limited fashion, to restrain arbitrary punishments and to
achieve larger statutory purposes.\textsuperscript{162} However, these statutes provide ab-
solutely no guidance on how these factors should be weighed and com-
pared in their use to calculate penalties.\textsuperscript{163} By themselves, these statu-
tory penalty factors mandate little discipline on the part of federal
judges assigning penalty amounts.

Within EPA’s administrative enforcement regime, ALJs and other
decisionmakers operate under a system with a great deal more guid-
ance. The Agency’s Civil Penalty Policy serves as the general guidance
for constructing penalties,\textsuperscript{164} but it has been supplemented by a number
of statute-specific and general EPA penalty guidelines.\textsuperscript{165} The general
policy creates a basic method for setting a proposed administrative pen-
alty. EPA must calculate a “preliminary deterrence amount,” which is

design factors have been particularly influential to federal courts that have applied them
to cases arising under other federal environmental laws without such provisions. See, e.g.,
United States v. Ekco Housewares, Inc., 62 F.3d 806, 814–16 (6th Cir. 1995) (applying CAA
and CWA factors in a RCRA enforcement case).

\textsuperscript{161} Riesel, supra note 157, § 4.07.


\textsuperscript{163} In civil penalty cases, the federal courts have employed two analytical approaches in
their penalty design that have been termed a top-down approach and a bottom-up ap-
proach. Under the top-down approach, the court starts by calculating the maximum pen-
alty allowed by the statute. It then adjusts the penalty downward by using the mitigating
factors set out in the statute. Using the bottom-up approach, the court determines the
economic benefit derived from the environmental violation and then considers the statu-
tory factors to adjust upward the penalty amount. See Riesel, supra note 157, § 4.01[1]; see,
e.g., Atl. States Legal Found., Inc. v. Tyson Foods, 897 F.2d 1128, 1142 (11th Cir. 1990)
2d 426, 444 (W.D. Pa. 2002) (using the bottom-up approach); United States v. Smithfield
method). Some courts vary their approach and permit either method to be used. See, e.g.,

\textsuperscript{164} See Riesel, supra note 157, § 4.04.

\textsuperscript{165} See id. § 4.07 (EPA has issued over twenty-five different penalty policies to imple-
ment the statutory crude guidelines).
composed of the sum of two elements: the economic benefit component and the gravity component.\textsuperscript{166} This preliminary figure is then modified through the application of adjustment factors.\textsuperscript{167} A number of additional factors are then added to the mix by a supplement to the 1984 Civil Penalty Policy.\textsuperscript{168} These other factors include: the benefit derived from delayed and avoided costs and the benefit of competitive advantage, “degree of willingness/negligence, degree of cooperation/non-cooperation, history of noncompliance, ability to pay, and other unique factors.”\textsuperscript{169} Potentially, the penalty proposed and the penalty finally assessed could be influenced by considerations of these wide-ranging and varied policies included within EPA’s civil penalty guidance.

The research analyzed the 191 case decisions that had imposed administrative civil penalties within the period under study. As above, sixty-nine decisions were removed from the sample because they failed to specify any calculus for the final penalty they imposed. This left 122 case decisions where a penalty rationale was set out and these cases were examined to identify what factors were mentioned in ALJ opinions. The intent was to determine what elements were most frequently mentioned and, therefore, were the most influential in the final decisionmaking. The results revealed the following pattern in descending degree of frequency:

1. Gravity of harm: 55/122 or 45.1%;
2. Ability to pay/ability to continue in business: 31/122 or 25.4%;
3. Economic benefit from noncompliance: 31/122 or 25.4%;
4. Degree of cooperation/cooperative attitude: 30/122 or 24.6%;
5. Other factors “as justice may require”: 27/122 or 22.1%;
6. Degree of willfulness: 17/122 or 13.9%;
7. History of noncompliance/history of prior violations: 17/122 or 13.9%;
8. Environmental damage: 11/122 or 9.0%.

If this sample is representative of most ALJ judgments, the gravity of harm component appears to be the most influential factor affecting the setting of administrative civil penalties, as it was mentioned nearly twice as frequently as the next four items. That being said, the two economic

\textsuperscript{166} Id. § 4.04.
\textsuperscript{167} Id.
\textsuperscript{168} Id.
factors, the cooperative-spirit element and the miscellaneous component, all seem to have approximately equal weight in these cases. Surprisingly, past noncompliant behavior on the part of the defendant does not seem to be a major driver of penalty determinations.

IV. CONCLUSIONS ABOUT ADMINISTRATIVE ENFORCEMENT
CIVIL PENALTIES

After reviewing the EPA administrative enforcement data for the five-and-a-half-year study period, a number of conclusions can be made. First, administrative enforcement within EPA is definitely increasing, even if recent EPA data is discounted for being somewhat over-inclusive. This appears to be the result of twin trends: a reduction in EPA and DOJ judicial civil enforcement and an increase in the use of administrative measures. If this de-emphasis of more formal judicial enforcement continues, EPA will employ these administrative tactics to seek both injunctive relief and civil penalties from violators of environmental regulations in the future. Serious questions remain whether this increased reliance on administrative enforcement measures sufficiently advances the environmental policy goals of the underlying statutes. A more complete analysis of this greater emphasis on the administrative process is warranted to determine if environmental policy goals are being adequately served.

Second, the data collected indicates that administrative enforcement can result in cost savings for the Agency by encouraging Consent Agreements as the principal method of resolving a large number of environmental complaints. While the EPA regional offices expend time and effort to secure these settlements, it would seem that more of both would be needed to expand judicial and administrative enforcement proceedings from their present levels. As the research shows, a relatively small portion of the administrative complaints actually result in contested cases. Put into perspective, for the five-plus years of the study period, there were less than 200 reported ALJ case decisions under the five major environmental statutes. This suggests that EPA conducted adjudicatory hearings in approximately thirty-five contested cases each year, with hundreds more resolved by CAFO settlement agreements.\footnote{As small as this number might seem, it is much larger than the fifteen reported civil lawsuits filed by EPA in fiscal year 2006. EnvTL. Integrity Project, \textit{supra} note 16, at 10 app.I.} If this trend continues, negotiated settlements conducted at the regional level will become the rule in environmental violation cases, with
administrative penalty proceedings being an occasional event and judicial enforcement serving as the rare exception.

Third, the review of the reported CAFOs and administrative case decisions reveals a surprising lack of adherence to EPA’s own rules of practice in administrative penalty hearings. This defiant behavior is not reflected by the parties charged with environmental offenses or EPA enforcement officials, but rather by the RJOs and ALJs who draft the CAFOs and write the case decisions. These are the decisionmakers who have been charged with the responsibility of implementing EPA’s administrative enforcement system. In particular, the absence of specific civil penalty calculations in the final penalty decisions undercuts the objectivity of the system as a whole. The Part 22 rules specifically require this explanation in all decisions to enhance the transparency and accountability of these decisionmakers. In an agency adjudicatory system where individual decisions rarely reach the public or the environmental community, it would seem especially important to comply with EPA’s own disclosure regulations as a means of reinforcing the legitimacy of this important and increasingly utilized penalty process. Unfortunately, this does not seem to be the case and one is left to wonder just how the particular civil penalties were calculated. The absence of coherent explanations certainly does not build confidence in the administrative enforcement system that is so isolated from public view.\(^{171}\)

Fourth, the administrative enforcement process not only results in low visibility and negotiated settlements but has also produced an adjudication format that results in a high number of penalty reductions. The number of downward penalty adjustments greatly exceeds the number of upward adjustments. This fact suggests that ALJs frequently perceive EPA’s initial proposed penalty to be too high, rather than too low. It is not altogether clear why EPA enforcement officials would repeatedly err on the high side. One possible answer is that they expect the ALJs to reduce the penalty, so they set their bargaining and litigation starting point high. Perhaps the ALJs systematically discount the EPA claims as being excessive from past experience in prior cases.

\(^{171}\) There is no requirement in EPA’s Part 22 rules for public participation or even publicity about administrative enforcement. The design of these rules is organized around a bilateral litigation-type relationship between EPA and the violator. The one exception is the possibility for “any person” to intervene in a Part 22 adjudicatory proceeding. See 40 C.F.R. § 22.11(a) (2007). This intervention is authorized along with the filing of nonparty briefs, but it is unclear just how anyone might know about the pendency of the enforcement proceeding so as to participate. \textit{Id.} §§ 22.11(b), 22.21(b) (indicating that notice of hearing is only given to parties). The same limits on outsider participation apply to appeals taken to the EAB.
Whatever the strategic reason might be for setting the initial penalty amounts, as the system has evolved, it rewards initial penalty challenges with a forty-two percent chance of downward adjustment. This adjustment would compensate penalty challenges with a relatively high probability of financial reductions.

Fifth, with a limited number of cases reviewed by the EAB, ALJ decisions, in reality, represent the final step in the EPA enforcement process. This conclusion means that a larger number of environmental enforcement disputes are being resolved by EPA’s ALJs without external review by courts. The only review of these decisions is potentially undertaken by the EAB. However, the small number of EAB appeals granted suggests that few cases are seriously reconsidered. All in all, this adjudicatory process vests considerable discretion and authority upon EPA’s ALJs and in regional officials to determine how environmental noncompliant behavior will be sanctioned.

While there may be certain efficiencies and other benefits from such an administrative enforcement system, there is no assurance that the right cases are being kept inside the Agency, rather than being enforced in a more public way outside of EPA in court. Perhaps this kind of case selection represents a proper exercise of prosecutorial discretion. However, this increased emphasis on administrative enforcement potentially diverts more serious cases away from the judicial forum. Perhaps these right cases will be resolved in the wrong venue. The expansion of this form of internal Agency enforcement, while simultaneously contracting the amount of external enforcement, holds the potential for inadequately sanctioning more serious environmental wrongs. While deciding which matters are worthy of referral to the DOJ for civil enforcement would be essentially a matter of discretionary judgment, the rapidly shrinking number of judicially enforced environmental cases calls this selection process into serious question.

Sixth, the sustained increase in EPA administrative enforcement emphasizing negotiated settlements and relatively low civil penalties may provide the regulated community with the idea that environmental enforcement does not present a serious threat of court enforcement, and so may not deter noncompliant conduct. If those subject to envi-

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172 When environmental civil enforcement is undertaken in the federal courts, case decisions are matters of public record and often receive publicity in the media. Even settlements proposed as consent agreements must be filed by EPA in the Federal Register for at least thirty days before the agreement is approved by the court in order to provide notice for non-parties and an opportunity to file their written comments with the Agency. See, e.g., Clean Air Act, 42 U.S.C. § 7413(g) (2000).
ronmental rules believe that regulatory compliance is something that can be negotiated away for a low-level sanction in a nonthreatening context, what will become of the deterrent effect of enforcement? Conventional wisdom suggests that serious and costly EPA enforcement is unlikely and that environmental charges can be dealt with through publicly invisible negotiation.

In conclusion, the increased use of the administrative penalty mechanism is not a clear-cut improvement in the attainment of environmental-quality objectives. In fact, this shift could actually represent a movement towards under enforcement and result in damage to the deterrent effect of all environmental enforcement. An unjustified and unwise over reliance on informal and less-costly methods of enforcing environmental law could have a deleterious effect on the willingness of regulated parties to meet their environmental obligations. If this actually does occur, the stealth system of administrative enforcement will have harmed environmental policy more than it has helped—certainly an unfortunate result.
ADULT SUPERVISION REQUIRED: THE COMMONWEALTH OF MASSACHUSETTS’S RECKLESS ADVENTURES WITH AFFORDABLE HOUSING AND THE ANTI-SNOB ZONING ACT

JONATHAN WITTEN*

Abstract: Recognizing that municipalities are inherently selfish and that they would intentionally exclude certain land uses and structures, the majority of states have required that their cities and towns plan for and accommodate undesirable land uses within their borders. The planned incorporation of undesirable and desirable land uses is a fundamental attribute of states that require and enforce the preparation of coordinated and rationally developed comprehensive plans. This Article discusses the approach taken in Massachusetts—a non plan state—and its myopic and regressive mechanism for compelling the construction of affordable housing. The Article suggests that the Massachusetts example is a failure of law and policy and that the statute, both abusive and abused, must be repealed. In its stead, Massachusetts must look to the success of numerous other states that have incorporated the development of affordable housing—and other land uses—within a rationally developed, and legally meaningful, comprehensive plan.

INTRODUCTION

The use of zoning as a form of land-use control dates back to Napoleon¹ and, in the United States, to Boston’s efforts to impose building height restrictions within established “districts.”² Zoning has been sanctioned as a legitimate police power by the U.S. Supreme Court on countless occasions³ and in each of the fifty states.⁴ Relentlessly criti-

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cized as exclusionary, and so confusing that it must be “written by Abbott and Costello,” zoning remains the most common form of land-use regulation in the nation and is relied upon by every major city and by the majority of cities and towns throughout the country.

A bedrock principle of zoning is that it is locally adopted and administered. Counties, cities, and towns adopt and enforce zoning, not the respective states nor the federal government. Zoning is myopic in practice—it looks neither to regional needs nor statewide concerns. Rather, zoning considers only those land-use goals articulated by the legislative body of the local government.

Long ago, state legislatures recognized that, if left alone, municipal governments would ignore the concerns of their neighboring communities and, most notably, fail to accept what was later termed as each municipality’s “fair share” of undesirable land uses.

Locally undesirable land uses include those that are undesirable from a neighborhood perspective, such as landfills and airports. But undesirable land uses also include those that are anticipated to be

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9 See id. at 4–5.

10 See id.


12 See Am. Planning Ass’n, Growing Smart Legislative Guidebook: Model Statutes for the Management of Change 5-6 to -7 (Stuart Meck ed., 2002) (identifying categories of Locally Undesirable Land Uses (LULUs) and Not in My Backyards (NIMBYs) as including airports, landfills, prisons, group homes, and solid waste facilities, among others). Below-market-rate housing and rental housing developments are not listed as LULUs or NIMBYs. See id.
deemed undesirable. In this instance, it is the state legislature that anticipates municipal opposition.

The result of this reality—that local governments are inherently selfish—is that the state preempts or marginalizes predicted neighborhood opposition. The preemption efforts in many states have been exceedingly progressive. These states have concluded that while these plans and regulatory requirements must incorporate issues of statewide and regional concerns, local governments know best how to plan for and regulate their respective land uses. These states are so-called “plan states” and are characterized as states that require their cities and towns to adopt meaningful and enforceable plans pursuant to articulated requirements established by the state legislature. While the city or town has significant latitude in how the plans are developed, enforced, and revised, the planning requirements nonetheless force the city or town to incorporate a fair share of defined undesirable uses.

13 Examples of preemptive efforts are found throughout the nation and are characterized by the state’s reliance on the supremacy clause found within every state constitution. As “creatures” of the state, local governments are subject to the give and take of police powers. See City of Trenton v. New Jersey, 262 U.S. 182, 189–90 (1923). The U.S. Supreme Court noted:

A municipal corporation is simply a political subdivision of the State, and exists by virtue of the exercise of the power of the State through its legislative department. The legislature could at any time terminate the existence of the corporation itself, and provide other and different means for the government of the district comprised within the limits of the former city. The city is the creature of the State.

Id.; see also Hunter v. City of Pittsburgh, 207 U.S. 161, 179 (1907) (“In all these respects the State is supreme . . . .”).

14 See Been, supra note 11, at 1048–49. Been argues, in relevant part, that the environmental justice movement seeks equity with regard to the placement of undesirable land uses and, as such, can be considered to be arguing against the flip side of past practices of cities and towns to restrict beneficial municipal services to only wealthy areas of the community. In both cases—the siting of undesirable land uses in disproportionately poor neighborhoods and the intentional withholding of public services and public benefits to poor neighborhoods—the state has played a key role. In the former example, the state has barred local governments from prohibiting or regulating the particular land use. In the latter example, the state has allowed local governments to expand municipal infrastructure without regard to a rational plan. Id. at 1002–05, 1015–16.


In other states, labeled as “non plan” states, state preemption efforts have been maddeningly regressive and dysfunctional. The efforts are regressive because, while the state strips local governments of the ability to regulate in specified areas, the state provides no mechanism for local governments to coordinate properly for—plan for—the very uses the state demands that cities and towns accommodate.

This Article explores the preemptive efforts employed by Massachusetts, a decidedly non plan state, in the field of below-market-rate—so-called affordable—housing development. The following discussion is an update of an earlier exposé of the Massachusetts affordable housing statute.

I. PREEMPTING AND MARGINALIZING MUNICIPAL OPPOSITION TO UNDESIRABLE LAND USES

Recognizing the likelihood of local opposition to certain land uses, states have routinely employed their preemptive powers either to block local opposition or to impose limitations on local powers. States have little choice; some land uses are deemed of such statewide or regional importance that any other response would allow local governments simply to preclude—impose barriers to—these undesirable land uses. At issue is how best to employ these preemptive powers. One option is to impose land-use requirements by requiring the fulfillment of a comprehensive plan. For land uses that the state deems required, cities and towns have the opportunity to site these uses in accordance, and consistent, with the municipality’s plan. Another option—the one discussed in this Article—is for the state to strip local controls almost in their entirety, unless and until the municipality meets the state prescribed objective.

The difference between the two options is stark. In the former, cities and towns are allowed to plan best for the land uses that occur within their borders, while fulfilling the state’s mandate on a schedule, and in a manner, that suits both the ends—provision of mandated land uses—and the means—compliance with the locally adopted comprehensive plan.

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17 E.g., Curtin & Witten, supra note 15, at 328–30.
18 Id.
20 “Barriers” is a frequent descriptor of the application of zoning and other land-use controls used by affordable housing advocates. See, e.g., Regulatory Barriers Clearinghouse, http://www.huduser.org/rbc (last visited Mar. 27, 2008).
21 Curtin & Witten, supra note 15, at 328–30.
the latter, planning is nonexistent; the state’s end goal trumps the mechanics of achieving it.

While this Article uses the Massachusetts affordable housing statute as an example of the wrong approach to creating affordable housing, or governance in general, a different example should prove helpful. First, imagine that a state, in order to fulfill the governor’s policy of improving public health and general environmental goals, required every city and town to preserve no less than twenty-five percent of its remaining undeveloped land as parks and open spaces. Cities and towns would be free to preserve open spaces and develop parks through a variety of regulatory and nonregulatory techniques.\(^{22}\)

Every five years, the state’s department of environmental protection would publish a state open space inventory, as noted in Table 1.\(^{23}\) Communities that met the open space minimums would be free to allow new residential and nonresidential development, subject to state zoning authority. However, cities and towns that had not met the open space minimums would be preempted from approving any new residential or nonresidential development not otherwise protected pursuant to the vested rights\(^{24}\) provisions found in state law. In other words, noncompliance with the state-established minimum open space requirements would suspend permit approval for new development.

<table>
<thead>
<tr>
<th>Community</th>
<th>Total Municipal Land Area</th>
<th>Qualifying Open Space</th>
<th>Additional Open Space Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>City A</td>
<td>9 square miles</td>
<td>450 acres</td>
<td>990 acres</td>
</tr>
<tr>
<td>Town B</td>
<td>21 square miles</td>
<td>1320 acres</td>
<td>12,120 acres</td>
</tr>
</tbody>
</table>


\(^{23}\) Table 1 is modeled after the Massachusetts Department of Housing and Community Development’s (DHCD) Chapter 40B Subsidized Housing Inventory, which contains a listing of the state’s 351 cities and towns and their status with respect to housing units that DHCD counts toward the community’s ten percent affordable housing quota. Department of Housing & Community Development, Chapter 40B Subsidized Housing Inventory (SHI) as of March 14, 2008, http://www.mass.gov/Ehed/docs/dhcd/hd/shi/shiinventory.htm [hereinafter SHI].

\(^{24}\) See Brad K. Schwartz, Note, Development Agreements: Contracting for Vested Rights, 28 B.C. Envtl. Aff. L. Rev. 719, 721–26 (2001) (providing a general discussion of vested rights in development decisions). The doctrine of vested rights is a principle of equitable estoppel—at some point, a developer has invested so much that the government should be estopped from changing the zoning regulations. Id. at 722.
The result of this fictional statute would be chaos. Cities and towns would revolt, perhaps, arguing that the state’s directive of open space, while certainly well meaning, trumps local control, is the antithesis of planning, ignores the interconnectedness of municipal and regional land-use issues, and is singularly myopic. Such a statute would impose a one-size-fits-all policy for a diverse state and elevate one municipal governance issue above and beyond all others. The statute would undoubtedly never pass and, if it did, would not likely survive. The flaw of the statute is not its intended objective—more open space—but rather the mechanism for achieving it—a draconian usurpation of local planning authority in an area where local planning authority is required.

Though the subject matter of this hypothetical statute—open space—is different, its shortcomings are identical to those of Massachusetts’ affordable housing statute, the intended subject matter of which is the creation of below-market-rate housing.25

II. THE WORKINGS OF THE MASSACHUSETTS ANTI-SNOB ZONING ACT: ANARCHY IN MOTION

Adopted in 1969, the purported purpose of the Massachusetts Anti-Snob Zoning Act26 was to provide much-needed housing for re-

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25 See Mass. Gen. Laws ch. 40B (2006). The Massachusetts comprehensive permit statute is a one-size-fits-all statute. It makes no distinction among the state’s unique geologic or topographic regions or among the state’s cities, suburbs, or relatively rural towns. That each and every community—both Boston and Lee, for instance—must attain the same standard is testimony to the drafters’ myopia and the Legislature’s continued unwillingness to appreciate that Boston (population approximately 589,141) is different from Lee (population approximately 2021). See Boston, Massachusetts (MA) Detailed Profile, http://www.city-data.com/city/Boston-Massachusetts.html (last visited Mar. 27, 2008); Lee, Massachusetts (MA) Detailed Profile, http://www.city-data.com/city/Lee-Massachusetts.html (last visited Mar. 27, 2008). More disturbing, the statute presumes that Lee is, should, or will become, simply an expansion of urban growth from Boston westward. “The wilderness, the isolated farm, the plantation, the self-contained New England town, the detached neighborhood are things of the American past. All the world’s a city now and there is no escaping urbanization, not even in outer space.” Morton White & Lucia White, The American Intellectual Versus the American City, in American Urban History: An Interpretive Reader With Commentaries 354–55 (Alexander B. Callow, Jr. ed., 1969).

turning Vietnam veterans, and to break down the barriers erected by the suburbs to the construction of affordable sale and rental housing.  

Previous efforts have discussed in detail the workings of the statute, including interpretations of how the statute could or should work.  

In practice, the statute provides a developer with a blank check to build an unlimited number of dwelling units on a parcel of land zoned for a different use or for a density far different from that proposed. Increasing the value of the blank check given to developers, the Supreme Judicial Court of Massachusetts (SJC) recently concluded that a board of appeals is empowered to approve nonresidential uses and structures

27 Now codified as 760 Mass. Code Regs. 56.01 to 56.08, without reference to Vietnam veterans, the regulations state the goal of reducing “regulatory barriers that impede the development of such housing,” 760 Mass. Code Regs. 56.01 (2008). Much has been written regarding the history of the statute and the curious timing of the adoption by the Legislature—by a two vote majority—in the wake of Boston’s “forced busing” and the racial crises that followed. See Paul K. Stockman, Note, Anti-Snob Zoning in Massachusetts: Assessing One Attempt at Opening the Suburbs to Affordable Housing, 78 Va. L. Rev. 535, 550 (1992). Suggestions that the adoption of the Act as retribution against the suburbs that supported the integration of the Boston schools is beyond the scope of this Article. See id. at 548–50 (chronicling the history of the statute and acknowledging it as one of “retribution” and “vengeance” against the suburbs); Cynthia D. Lacasse, The Anti-Snob Zoning Law: The Effectiveness of Chapter 774 in Getting Affordable Housing Built (June 1987) (unpublished Master’s thesis, Massachusetts Institute of Technology) (on file with author). “According to Robert Engler, it was passed by a coalition of urban legislators in retaliation for the passage of a racial imbalance bill four years earlier that ‘Boston legislators . . . felt . . . was being shoved down their throat by liberal suburban legislators.’” Id. at 6.  


within a comprehensive permit project where the underlying zoning otherwise permitted the commercial activity.\(^\text{29}\)

Where the land is zoned for industrial use, the developer may propose residential dwellings. Where the land is zoned for dwelling units at a density of two units per acre, the developer may propose ten, twelve, or twenty units per acre. Where the height limitation of structures in the community is thirty-five feet, the developer may propose a dwelling height of fifty or eighty feet. Heretofore, it was commonly presumed that a grant of a comprehensive permit was for the construction of housing only, and not principal or ancillary *commercial* uses or structures.\(^\text{30}\)

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\(^{29}\) Jepson v. Zoning Bd. of Appeals of Ipswich, 876 N.E.2d 820, 829–30 (Mass. 2007). The SJC noted:

> Flexibility, such as that demonstrated by the minimum percentage of affordable housing units required under the statutory scheme, promotes the continued development of affordable housing by providing economic incentives (such as financial cross-subsidization derived from rental income of market-rate units) to developers so they can include in their projects needed affordable housing. Extending that flexibility to allow an incidental commercial component under the umbrella of the comprehensive permit provides additional incentives, including economic, to developers to establish affordable housing, and serves to further the development of needed affordable housing.

*Id.* Seizing the moment, the DHCD codified new regulations that permit nonresidential uses and structures within comprehensive permit developments. *See* 760 Mass. Code Regs. 56.01–08 (2008). Note the definition of Project: "A Project may contain ancillary commercial, institutional or other non-residential uses, so long as the non-residential elements of the Project are planned and designed to: (a) complement the primary residential uses; and (b) help foster vibrant, workable, livable, and attractive neighborhoods consistent with applicable local land use plans." *Id.* at 56.02. The regulations do not define the catchy phrases “vibrant,” “workable,” “livable,” or “attractive.” Consistent with the abandonment of predictable outcomes that has defined the statute since 1969, the new regulations leave every neighborhood susceptible to a developer’s inclusion of a Wal-Mart, liquor store, or movie theater within a comprehensive permit project. After all, Wal-Mart, liquor stores, and movie theaters certainly add to the vibrancy, workability, livability, and attractiveness of neighborhoods—at least from the perspective of the developer.

\(^{30}\) Landers v. Bd. of Appeals of Falmouth, 579 N.E.2d 1375, 1376 (Mass. App. Ct. 1991). The implications of the SJC decision in *Jepson*, coupled with DHCD’s unprecedented maneuver to wrest zoning control away from cities and towns, will, without question, be the death of zoning in Massachusetts. The historic and time-tested means of amending zoning for land-use changes through the legislative process will become obsolete, as it has regarding changes allowing greater density. Empowered with the ability to include commercial uses within a comprehensive permit project, the statute, already representing legislative anarchy, will cause immeasurable chaos. Not only will neighborhoods be subject to unlimited density, those same neighborhoods will be subject to unlimited residential densities *and* commercial development.
A. Applicants for a Comprehensive Permit

An applicant must: (1) be a public, nonprofit, or “limited dividend”\textsuperscript{31} organization; (2) provide evidence that the project is “fundable” by a subsidizing agency under a low- or moderate-income housing program;\textsuperscript{32} and (3) provide evidence of “site control”\textsuperscript{33} in order to receive a comprehensive permit.\textsuperscript{34}

B. The Application to the Board of Appeals

Once these three conditions have been met, the applicant may thereafter apply to the local board of appeals for a comprehensive

\textsuperscript{31} 760 Mass. Code Regs. 56.02 (2008) (defining a “limited dividend organization” as one that agrees to be bound by an agreement entered into with a subsidy agency to limit a project’s profits to set by the subsidizing agency). “Typically the regulatory agreement limits the profits of developers of a 40B home ownership project to no more than 20% of total allowable development costs, and through this provision developers are deemed to be a ‘limited dividend organization’ meeting the requirements set forth in Chapter 40B.” Letter from Gregory W. Sullivan, Inspector Gen., to the Joint Comm. on Hous. (Oct. 23, 2007), available at \url{http://www.mass.gov/ig/publ/40b_hearing_letter.pdf}.

\textsuperscript{32} Proof of “fundability” is perfected by the receipt of a “project eligibility” letter from a recognized state agency, most notably the Massachusetts Housing Finance Agency (MassHousing). See 760 Mass. Code Regs. 56.04(6). Once fundability is established, the project remains fundable unless the project eligibility letter is withdrawn. See id. at 31.01(2)(f). MassHousing identifies itself as “the state’s affordable housing bank.” MassHousing, https://www.masshousing.com (last visited Mar. 27, 2008). It has been designated as the “project administrator” for the New England Fund, a funding program of private banks that has been declared a “federal” subsidy source for the purposes of 40B by the Housing Appeals Committee and the SJC. See Town of Middleborough v. Hous. Appeals Comm., 870 N.E.2d 67, 70–71 (Mass. 2007); FHLBBoston, Housing & Economic Growth, Funding Programs, New England Fund, http://www.fhlbboston.com/communitydevelopment/fundingprograms/nef/03_02_03e_legislation.jsp (last visited Mar. 27, 2008). The Inspector General’s office attacked MassHousing for “moving in a direction which would further compromise the oversight process by excluding the municipalities from actively participating in the process as monitoring agents” and for overseeing a process that is “broken.” Letter from Gregory W. Sullivan, Inspector Gen., to Thomas Gleason, Executive Dir., MassHousing (Sept. 13, 2006), available at \url{http://www.mass.gov/ig/publ/masshous.pdf}. MassHousing subsequently attacked the Town of Marion when the Town challenged the Agency’s malfeasance in issuing a project eligibility letter. Town of Marion v. Mass. Hous. Fin. Agency, 861 N.E.2d 468, 470–72 (Mass. App. Ct. 2007). MassHousing accused the Town of Marion of filing a frivolous complaint and sought costs and double attorney’s fees where the Town alleged that MassHousing failed to perform the due diligence required of it under the comprehensive permit regulations. Id. at 471–72. Note that MassHousing sought costs and double attorney’s fees, not the developer of the comprehensive permit project. See id. MassHousing’s request was denied. Id. at 472.

\textsuperscript{33} 760 Mass. Code Regs. 56.04(4)(g) (explaining that site control is established where the applicant can demonstrate a sufficient interest in the site).

\textsuperscript{34} Id. at 56.04(1)(a)–(c).
permit. The board’s powers to condition the approval of the application, or deny the application outright, are dramatically limited by statute, Housing Appeals Committee decisions, and appellate court holdings.

It is fiction to suggest that the board of appeals has any substantive control over the project or process, save forcing the applicant to spend time and money going through the local approval process. The

35 Mass. Gen. Laws ch. 40B, § 20 (2006); 760 Mass. Code Regs. 56.04(1)(a)–(c) (enumerating the three condition precedent requirements in order to be eligible to submit an application for a comprehensive permit).

36 Mass. Gen. Laws ch. 40B, § 23 (providing the Housing Appeals Committee with two alternative resolutions for comprehensive permit disputes, depending on the origin of the appeal: (1) those that resulted from a permit denial, and (2) those that resulted from a permit approval with conditions that the developer complains render the project “uneconomic”). Where the permit was denied by the local board of appeals, the Housing Appeals Committee is empowered to vacate the decision and order the issuance of a new permit. Id.

Where the comprehensive permit is approved by the local board of appeals, the Housing Appeals Committee’s powers do not include annulling or vacating the board’s decision, but rather are limited to modifying the board’s decision. Id. (“If the committee finds, in the case of an approval with conditions and requirements imposed, that the decision of the board makes the building or operation of such housing uneconomic . . . it shall order such board to modify or remove any such condition or requirement . . . and to issue any necessary permit or approval . . . .” (emphasis added)).


39 Many have suggested that the local board has discretionary authority in its review of comprehensive permit applications. This discretion is an illusion. See, e.g., Zoning Bd. of Appeals of Greenfield, 446 N.E.2d at 754 n.13. The court stated:

[B]ut the statute does not require that a noncomplying city or town issue a permit in every case where the ten percent test has not been met. In such a case the statute imposes a general test of reasonableness predicated on the regional need for low and moderate income housing; the number of low income people in the affected municipality; health and safety considerations; and the promotion of compatible site and building design and preservation of open spaces. We think the statute provides an adequate decisional framework for dealing with the problem of proposed developments which could cause a community to overshoot substantially the ten percent benchmark for low and moderate income housing.

Id. (citation omitted). Even the Citizens’ Housing and Planning Association (CHAPA), a vocal and active supporter of the statute, had trouble offering an answer to its own ques-
Chairman of the Housing Appeals Committee shared his personal views of the comprehensive permit statute in an article where he suggested that the comprehensive permit law was one not of “command-and-control regulation,” but rather “market-based, incentive-based regulation.”

Anyone who has participated in the comprehensive permit process, from initial filings with the board of appeals to a decision from the Housing Appeals Committee, must wonder whether she has participated in the same process as the one discussed by the Chairman.

The comprehensive permit process is precisely a command-and-control system, notwithstanding the Chairman’s attempt to label it otherwise. Worse, DHCD has orchestrated a process whereby cities and towns are led to believe that the comprehensive permit statute is their statute and one that they can use in a creative and opportunistic manner. But the facts are irrefutable. The statute takes away all local authority and leaves nothing in its place. First, the comprehensive permit application is developer, not municipality, driven. It is the developer who decides where the project will be located, how many units the province, “Do Communities Have Control Over the Proposed Development?” Citizens’ Housing & Planning Association, Fact Sheet on 40B: The State’s Affordable Housing Zoning Law 3 (Oct. 2007), http://www.chapa.org/pdf/40BFactSheetOctober2007.pdf. The Fact Sheet answered the question as follows:

Zoning boards and other town officials often work with developers to modify the project. Furthermore, the zoning board may include conditions and requirements on any aspect of the project such as height, density, site plan, utility improvements, or long-term affordability—provided these conditions do not make the development economically unfeasible.

Id.


41 The author has acted as counsel in numerous Housing Appeals Committee matters representing cities and towns and intervenors. He cannot recall any proceeding before the Committee wherein command and control—that is the Committee’s command and control—did not dominate the proceedings and the outcome.


In light of the changes to Chapter 40B in practice and regulation, the guidelines outlined below attempt to assist communities in reviewing comprehensive permit projects in a way that maximizes the opportunity for a successful outcome. A successful outcome could mean a project approval or in appropriate instances, a denial. These guidelines suggest that a negotiated outcome will, in most cases, garner the best result for a community.

Id. at 2.
ject will contain, and whether to offer on- or off-site improvements to mitigate the impact of the development. Second, the application can be in complete derogation of any plan or policy adopted by the community. There is no requirement, even where the municipality has adopted and approved a “master plan, comprehensive plan, or community development plan,” that a comprehensive permit developer complies with the plan. Third, the ticket to apply to the board of appeals—the project eligibility letter—cannot be challenged independent of the comprehensive permit, and, in the words of the ticketing agency, MassHousing, is simply a “business judgment” decision. Fourth, the very issues that matter most to the community once the project is built—ensuring affordability and monitoring excess profits—have been stripped away by the Housing Appeals Committee.

C. The Housing Appeals Committee and the Department of Housing and Community Development

In one of several decisions on the same subject, the Housing Appeals Committee recently ruled that, notwithstanding the fraud uncovered by the Inspector General’s office and the pleas from the Inspector General to ensure municipal participation in the cost-certification and monitoring process, as it is “broken,” the Committee ruled that a

43 See 760 Mass. Code Regs. 56.07(3)(g) (2008) (“The Committee may receive evidence of and shall consider” whether a city or town has a plan and its results in implementing that plan).
45 See Brief on Behalf of Defendant Massachusetts Housing Finance Agency at 20, Town of Marion, 861 N.E.2d 468 (No. 05-P-1848). In opposing the Town of Marion’s claim that MassHousing failed to perform the due diligence required prior to issuing a project eligibility letter for a comprehensive permit project, MassHousing stated that it was not required to “solicit or defer to local opinions about which projects should or should not be funded. It creates a housing bank, not a forum or tribunal. It provides absolutely no basis for a challenge by a community to any eligibility or funding decision by MassHousing.” Id. at 23–24.

46 The Committee must be distinguished from the Chairman. The Chairman, or the Committee’s additional hearing officer, conducts the adjudicatory hearings. 760 Mass. Code Regs. 56.06(7)(e). The Housing Appeals Committee consists of five members, one of whom is the Chairman. The remaining four Committee members, while they sign decisions rendered by the Committee, do not attend the adjudicatory hearings and do not vote in a public meeting. Upon information and belief, opportunities to present arguments before the full Committee have never been permitted. “Do not arouse the wrath of the great and powerful Oz. I said come back tomorrow.” The Wizard of Oz (MGM 1939).
47 See Letter from Gregory W. Sullivan, supra note 32.
town’s attempts to ensure that the affordable housing units were properly preserved “[were] clearly not matters of local concern,” that “MassHousing may unilaterally decided those issues,” and that “the condition in the comprehensive permit requiring submission to and approval by the Board of a draft Regulatory Agreement is improper and thus void.”

Quite simply, there is no legal basis for the Housing Appeals Committee’s or DHCD’s eristic position—only an assertion of über authority that, until recently, has gone unchallenged by cities and towns. The statute itself empowers the board of appeals to address an unlimited range of issues through appropriate conditions on the comprehensive permit. No other section of chapter 40B, any regulation, or any judicial decision limits the scope of issues that boards may address through conditions to ensure that 40B developers do not “enrich themselves at the expense of the municipalities and their affordable housing initiatives,” as DHCD and MassHousing have failed to do.

DHCD can cite to no statute, regulation, or judicial decision prohibiting the board from imposing regulatory conditions based on a municipality’s valid local concerns, and consistent with its affordable housing needs—for example, limiting the project to ownership, rather than rental units; setting aside the project’s affordable units for local residents; or ensuring the perpetual affordability of units through a restriction of its own design.

It is fair to ask why DHCD is so insistent that it has exclusive authority with respect to regulatory conditions that the statute reserves to boards of appeals. Why, where a municipality has granted a comprehensive permit for the construction of affordable housing is the agency so adamant that it, not the town, select the monitoring agent? Similarly, why would the agency, not the town, specify how cost certification will be conducted and by whom? Why would the agency, not the town, determine how to monitor the sale or rental of affordable units and by whom? Such regulatory and monitoring conditions, while unnecessary in the realm of conventional development, are unfortunately necessary

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48 Groton Residential Gardens, LLC, No. 05-26, slip op. at 11, 13 (Mass. Housing Appeals Committee Aug. 10, 2006) (quoting CMA, Inc., No. 89-25, slip op. at 7 (Mass. Housing Appeals Committee June 25, 1992)) (inv olving the Groton Board of Appeals); see also Attitash Views, LLC, No. 06-17, slip op. at 1 (Mass. Housing Appeals Committee Oct. 15, 2007) (inv olving the Amesbury Zoning Board of Appeals).


50 See Letter from Gregory W. Sullivan, supra note 32 (noting that “the cost certification and monitoring process is ‘broken’”).
in chapter 40B permitting, in order to prevent “the transfer of profit from a municipality’s affordable trust fund to a developer’s personal bank account.”\textsuperscript{51} To the extent that a town might benefit from agency expertise with respect to programmatic and regulatory issues, such expertise may be placed at the town’s disposal by way of technical assistance rather than by way of threat and assertions of supremacy.

It is also fair to ask why DHCD continues to insist on its own expertise, and that of MassHousing, with respect to regulatory issues in light of MassHousing’s well-documented and abysmal failure to provide adequate oversight of the regulatory components of chapter 40B projects—such as the cost certification and limited dividend requirements.

As a result of MassHousing’s inability or unwillingness to perform its oversight obligations for New England Fund and Housing Starts projects, “reported developer profits were routinely and substantially understated,” resulting “in many cases . . . [of] profit windfalls to the developers which deprived the respective municipalities of the excess profits that should have been paid to the municipality under the regulatory agreements.”\textsuperscript{52}

In light of the failure of MassHousing and DHCD to perform their oversight obligations, one might expect DHCD to rethink its claims of

\textsuperscript{51} See Letter from Gregory W. Sullivan, Inspector Gen., to Aaron Gornstein, Executive Dir., CHAPA (Dec. 6, 2006), \textit{available at} http://www.mass.gov/ig/publ/40bchapa.pdf; see also Letter from Gregory W. Sullivan, Inspector Gen., to Ben Tafoya, Chairman, Bd. of Selectman, Town of Reading, and Peter Hechenbleikner, Town Manager, Town of Reading (Jan. 2, 2007), \textit{available at} http://www.mass.gov/ig/publ/40b_reading.pdf (detailing results of an independent audit of a New England Fund project in Reading, finding gross understatement of developer profit, impermissible land valuations, related-party transactions, and other abuses).

\textsuperscript{52} See Letter from Gregory W. Sullivan, Inspector Gen., to Thomas R. Gleason, Executive Dir., MassHousing (Sept. 13, 2006), \textit{available at} http://www.mass.gov/ig/publ/masshous.pdf. The Inspector General specifically noted the failure of designated monitoring agents to identify such abuses:

In general the cost certification “audits” performed against these financial statements by the appointed monitoring agent either failed to uncover or challenge these apparent abuses and reinforced the developer’s understated profit margins.

In the opinion of this Office, many municipalities have a false sense of security that effective cost certification monitoring and enforcement is being conducted by the subsidizing agencies on their behalf. The reality is that developers are taking advantage of a weak oversight system and are enriching themselves at the expense of the municipalities and their affordable housing initiatives. Thus, local initiatives to expand and create affordable housing, with these excess profits, have been thwarted by the apparent manipulation by developers in a poorly-monitored oversight system.

\textit{Id.}
expertise. At the very least, one might expect some introspection on the part of both agencies—none appears to be forthcoming.

D. The Comprehensive Permit

The applicant’s sole obligation is to provide twenty or twenty-five percent of the dwelling units within the project for rent or sale to those designated by the subsidy program as meeting affordable criteria.\(^{53}\) Simply put, for a return of an unlimited density and a project not bound by any local rule or regulation, the applicant is required to set aside a percentage of the dwelling units at an affordable rental or sale price.\(^{54}\) The benefits to the developer are obvious. Where zoning would allow ten dwelling units, a developer may propose one hundred, with seventy-five—i.e., sixty-five more than would otherwise be allowed—sold without restriction. The benefits to the community are far less obvious.

While it is true that the community now has an additional twenty-five below-market-rate dwelling units, these units are built at a location and density of the developer’s, not the municipality’s, choosing. The density bonus afforded the developer—one hundred units as opposed to ten—has not been anticipated by the city or town’s school, police, or fire departments. The bonus has not been incorporated into capital plans or budgets, nor wastewater treatment or water supply planning needs.

Where a board of appeals approves the application with conditions that the applicant finds objectionable, or denies the application, the developer has the right to appeal to the Housing Appeals Committee, a five-member agency established to review and adjudicate appeals from disgruntled developers pursuant to chapter 40B, section 22.\(^{55}\) Chronicled elsewhere, the Housing Appeals Committee has shown little—if any—sympathy to the concerns expressed by boards of appeals.\(^{56}\) In recent decisions, the Committee has scaled a new level of arrogance, holding, for example, that the statute permits the appropriation of

\(^{53}\) See MassHousing, Housing Starts Process and Guidelines 3 (2007), available at https://www.masshousing.com/portal/server.pt/gateway/PTARGS_0_2_376_0_0_18/HS_Guidelines.pdf (twenty-five percent of the dwelling units required to be set aside); MassDevelopment, Housing, www.massdevelopment.com/custom/housing.aspx (last visited Mar. 27, 2008) (twenty percent of the dwelling units to be set aside to qualify for low income housing tax credit). The subsidizing agency establishes the number of dwelling units that are to be set aside at below market rates. See MassHousing, supra, at 3; MassDevelopment, supra.

\(^{54}\) See MassHousing, supra note 53, at 3; MassDevelopment, supra note 53.


\(^{56}\) See Witten, supra note 19, at 533.
municipal land to assist a developer’s comprehensive permit application.\footnote{Wash. Green Dev., LLC, No. 04-09, slip op. at 17–18 (Mass. Housing Appeals Committee Sept. 20, 2005) (involving the Groton Board of Appeals).} In a narrowly tailored decision, the SJC reversed the Superior

Though this Committee has the power to order approval of an easement, the question remains as to whether it is justified under the facts presented. . . . The town has not drawn our attention to, nor do we see from all the evidence presented to us, any harm that can possibly be done by slight regrading and removing of vegetation along a strip of land that is approximately ten feet wide at its widest point. We find that such changes do not raise a sufficient local concern to outweigh the regional need for affordable housing. We therefore conclude that [Groton Electric Light Department’s] refusal to grant an easement is not consistent with local needs, and we will order it.

\textit{Id.} The Superior Court upheld the Committee’s decision, referring to the lost property right as “minimal” and referenced the SJC’s holding in \textit{Board of Appeals of Maynard v. Housing Appeals Committee}. See Zoning Bd. of Appeals of Groton v. Hous. Appeals Comm., No. 053733L, 2007 WL 1540233, at *2 (Mass. Super. Ct. Feb. 9, 2007) (citing Bd. of Appeals of Maynard v. Hous. Appeals Comm., 345 N.E.2d 382, 385–86 (Mass. 1976)) (concluding the comprehensive permit statute empowers a board of appeals—and the Housing Appeals Committee—to eliminate the need for a town meeting vote to extend a municipal sewer line). The Committee was not troubled by the fact that the statutes clearly require legislative approval as a required condition precedent to the conveyance of interests in municipal real property, choosing instead to conclude that the comprehensive permit statute trumps even property disposition requirements imposed upon local governments. See Mass. Gen. Laws ch. 30B, § 16 (2006) (requiring process for conveying interests in municipal real property with a value greater than $25,000); Mass. Gen. Laws ch. 40, § 3 (2006) (requiring process for conveying interests in municipal property acquired by cities and towns by purchase); Mass. Gen. Laws ch. 40, § 15 (requiring process for conveying interests in municipal property acquired by a means other than purchase, such as by abandonment); Groton, 2007 WL 1540233 at *2. While the Groton matter involved the conveyance of an easement, the principle relied upon in Groton—that chapter 40B allows a board of appeals and the Housing Appeals Committee to order, summarily, the transfer of municipal property notwithstanding no less than two statutory requirements prohibiting it without compliance with due process—will most certainly be used by entrepreneurial developers in the future. See id. A developer who needs access through public property—the Boston Public Gardens, for example—can, following the Groton decision, simply ask the local board of appeals to approve the same, and if the local board declines, the Housing Appeals Committee’s largesse awaits. Even more perverse, if the Housing Appeals Committee can order an interest in municipal property to be conveyed to a private developer, then certainly the same Committee can order private property to be conveyed to a private developer. After all, the Committee could argue, private property taken from A (a landowner) would be serving the same public purpose by providing it to B (the developer) as was found constitutional in \textit{Kelo v. City of New London}, among other cases. See, e.g., 545 U.S. 469, 479, 483–84 (2005). These hypothetical situations are not exaggerated. See Town of Middleborough v. Hous. Appeals Comm., 870 N.E.2d 68, 76 (Mass. 2007) (“[W]e recognize that ‘[w]here the focus of a statutory enactment is reform,’ as is true of the [comprehensive permit] act, ‘the administrative agency charged with its implementation should construe it broadly so as to further the goals of such reform.’” (quoting Mass. Fed’n of Teachers, AFT, AFL-CIO v. Bd. of Educ., 767 N.E.2d 549, 559 (Mass. 2002)) (second alteration in original) (citation omitted)).
Court’s holding and reaffirmed that the Housing Appeals Committee lacks the authority to override state, as opposed to local, laws and regulations.\textsuperscript{58}

A board of appeals may avoid a developer’s appeal to the Housing Appeals Committee only by demonstrating that the city or town affordable housing is “consistent with local needs,” a formulistic determination included in both statute and regulation.\textsuperscript{59} As discussed below, however, a board of appeals is not precluded from approving comprehensive permit applications—one or all—even after the municipality has achieved the “consistent with local needs” standard.\textsuperscript{60}

E. Judicial Review of Comprehensive Permit Decisions

In a remarkable decision, the SJC held that an abutter to a comprehensive permit development did not have standing to challenge the project with respect to a claim of depreciation of property values.\textsuperscript{61} The Court concluded that an abutter to a 115-unit rental housing project, located in a zoning district that was limited to single-family dwellings, could not raise property devaluation as a cognizable claim sufficient to confer standing.\textsuperscript{62}

The Court’s holding in \textit{Standerwick v. Zoning Board of Appeals of Andover} is singularly painful in a long list of holdings regarding the comprehensive permit statute.\textsuperscript{63} The courts have demonstrated little regard

\textsuperscript{59} Mass. Gen. Laws ch. 40B, § 20 (2006) (providing three mechanisms for achieving consistency with local needs status: (1) ten percent of a municipality’s housing stock subsidized; (2) one and one half percent of the municipality’s land area being comprised of subsidized housing; or (3) at least three-tenths of one percent of the municipality’s land area, or ten acres, is subject to dwelling unit construction pursuant to the statute within a one year period); 760 Mass. Code Regs. 56.03 (2008) (providing four additional mechanisms for achieving consistency with local needs status: (1) “Recent Progress Toward Housing Unit Minimum”; (2) the project is a large scale project; (3) approval of a Housing Production Plan; and (4) “Related Applications”).
\textsuperscript{60} Boothroyd v. Zoning Bd. of Appeals of Amherst, 868 N.E.2d 83, 84–85, 88–89 (Mass. 2007).
\textsuperscript{62} Id. at 200, 201, 206 (“The preservation of real estate values of property abutting an affordable housing development is clearly not a concern that the G.L. c. 40B regulatory scheme is intended to protect.”).
\textsuperscript{63} See, e.g., Town of Middleborough v. Hous. Appeals Comm., 870 N.E.2d 67, 80 (Mass. 2007) (noting federal subsidy for use in a comprehensive permit project includes loans originating from private banks that are members of the Federal Home Loan Bank of Boston, a private, for-profit corporation); Boothroyd, 868 N.E.2d at 88–89 (stating comprehensive permits may be issued by a board of appeals notwithstanding community’s consistent
with local needs standards as the proper measurement is the *regional* need for affordable housing); *Standerwick*, 849 N.E.2d at 200; Dennis Hous. Corp. v. Zoning Bd. of Appeals of Dennis, 785 N.E.2d 682, 690–91 (Mass. 2003) (explaining comprehensive permit statute allows local board of appeals to waive historic district regulations, adopted by the Legislature, applicable to Route 6A on Cape Cod); Planning Bd. of Hingham v. Hingham Campus, LLC, 780 N.E.2d 902, 903 (Mass. 2003) (deciding comprehensive permit statute does not extend standing to challenge a comprehensive permit to a municipal planning board); Zoning Bd. of Appeals of Wellesley v. Ardemore Apartments Ltd. P’ship, 767 N.E.2d 584, 586 (Mass. 2002) (“[W]here a comprehensive permit itself does not specify for how long housing units must remain below market, the Act requires an owner to maintain the units as affordable for as long as the housing is not in compliance with local zoning requirements.”); Bd. of Appeals of Hanover v. Hous. Appeals Comm., 294 N.E.2d 393, 424 (Mass. 1973) (concluding comprehensive permit statute does not violate equal protection or due process guarantees).

On February 5, 2008, the SJC heard oral argument in an appeal of an Appeals Court decision overturning a Superior Court holding that an abutter to a comprehensive permit project loses his right to appeal under chapter 40B, section 21 (referencing chapter 40A, section 17) where the Housing Appeals Committee rules in favor of the applicant in the applicant’s appeal to the Committee under chapter 40B, section 22. Taylor v. Bd. of Appeals of Lexington, 865 N.E.2d 1140 (Table) (2007) (granting further appellate review); Taylor v. Bd. of Appeals of Lexington, 863 N.E.2d 79, 84–86 (Mass. App. Ct. 2007) *review granted*, 865 N.E.2d 1140 (Table) (2007). The Appeals Court recognized the abutter’s statutory right of appeal and held that chapter 40B provides for “two distinct avenues of appeal” from the issuance of a comprehensive permit by a municipal board. *Taylor*, 863 N.E.2d at 82. As argued by the applicant, a decision by the Housing Appeals Committee trumps or moots an abutter’s appeal pursuant to chapter 40B, section 21. *Id.* at 83.

The two types of comprehensive permit appeals—the abutter’s appeal for judicial review under chapter 40A, section 17 and the developer’s administrative appeal—differ greatly in both substance and procedure. These differences give rise to two different types of appellate record, and present issues to the trial court in a significantly different posture. Consequently, neither appeal may be substituted for the other or may be said to moot the other. Appeals to the Housing Appeals Committee are not intended as the equivalent of court proceedings with the use of discovery, motions practice, and trial to achieve resolution of all disputed issues between parties. Rather, such appeals are intended to provide an expedited form of review for the developer on a narrow range of issues. By design, Housing Appeals Committee proceedings do not air and adjudicate the full range of issues arising from the grant of a comprehensive permit, such as the claims of abutters. The scope of issues that abutter-interveners are permitted to raise, and present relative evidence, has been further narrowed by decisions of the Committee. *See*, e.g., *Grandview Realty, Inc.*, No. 05-11, slip op. at 3–4 (Mass. Housing Appeals Committee Feb. 10, 2006) (involving the Lexington Zoning Board of Appeals).

The Committee has repeatedly held, for example, that abutter-interveners are not permitted to raise programmatic or financial issues relating to project proposals, or to challenge the existence of jurisdictional prerequisites for comprehensive permit applications. *See*, e.g., *id.* The administrative record on appeal to the Superior Court under chapter 30A, section 14, therefore, contains no evidence on programmatic, financial, or jurisdictional issues—or any other issues excluded by the hearing officer at his or her discretion—that abutter-interveners sought to preserve. Since, under chapter 30A, section 14, review is confined to the administrative record, there is no subsequent opportunity during Superior Court proceedings for the abutter-interveners to place evidence in the record regarding their claims. Mass. Gen. Laws ch. 30A, § 14(5) (2006). Finally, due to the different standards of review in the two types of appeals, an issue raised by an abutter
for the consequences of unpredictable land-use decisions and whether infliction of such injury on individuals—abutters—to comprehensive permit projects serves the statute’s purported goal of producing affordable housing. It is not as if the courts do not recognize the obvious—that the costs and investments one makes in purchasing a home are enormous.  

seeking judicial review under chapter 40A, section 17 is in an entirely different posture than the same abutter raising an issue in appeal under chapter 30A, section 14. The judge reviewing a comprehensive permit under chapter 40A owes no deference to the board, and makes independent findings of fact. See Mass. Gen. Laws ch. 40A, § 17 (2006). The judge reviewing a decision of the Housing Appeals Committee must defer to agency discretion and is limited to the facts found in the administrative record. Mass. Gen. Laws ch. 30A, § 14(5). An abutter in a chapter 40A appeal is able to place evidence in the record regarding programmatic issues, upon which the trial judge may make findings of fact. See Mass. Gen. Laws ch. 40A, § 17. The same abutter, assuming he or she is granted intervener status, will be precluded from placing such evidence in the administrative record—and thus prevented from having the issue reviewed by the trial court on appeal under chapter 30A. As a result, abutters face a wholly different burden proving their case before a judge in a chapter 30A appeal of a chapter 40B permit as compared to a chapter 40A appeal. In addition, the SJC has accepted on direct appellate review a related case from Middlesex Superior Court, Taylor v. Housing Appeals Committee, consolidated with a Norfolk Superior Court case, Board of Appeals of Canton v. Housing Appeals Committee, where the two courts reached different conclusions as to when a municipality is entitled to measure consistency with local needs. Supreme Judicial Court, Amicus Announcement, SJC-10048 and SJC-10057, http://www.mass.gov/courts/sjc/amicus/sjc-10048-10057.html (last visited Mar. 27, 2008). In the Norfolk decision, a Superior Court judge ruled that the measurement occurs when the Housing Appeals Committee renders its decision. Zoning Bd. of Appeals of Canton v. Hous. Appeals Comm., Civ. Action No. 2005-1868 (Mass. Super. Ct. Nov. 10, 2006) (Grabau, J.). The Middlesex Superior Court judge ruled that the measurement occurs much earlier; when the board of appeals files its decision with the local clerk. Taylor v. Hous. Appeals Comm., Civ. Action No. 2005-2910-B (Mass. Super. Ct. Apr. 5, 2007) (Kottmyer, J.).

64 See Vazza v. Bd. of Appeals of Brockton, 269 N.E.2d 270, 274 (Mass. 1971) (“Purchasers of real estate are entitled to rely on the applicable zoning ordinances or by-laws in determining the uses which may be made of the parcel they are buying . . . . For many persons, particularly those purchasing houses, this is the largest single investment in their lives.”). More recently, in a dissenting opinion in a case involving the question of when expansions to a preexisting nonconforming structure required a special permit pursuant to chapter 40A, section 6, Justice Cordy wrote, “Requiring homeowners to run such an administrative gauntlet impedes and burdens the upgrade of a large part of our housing stock, much of which (except perhaps along the water or on the island of Martha’s Vineyard) is relatively ‘affordable.’” Bransford v. Zoning Bd. of Appeals of Edgartown, 832 N.E.2d 639, 651 (Mass. 2005); see also Bjorklund v. Zoning Bd. of Appeals of Norwell, 450 Mass. 357, 357 (2008) (reexamining and upholding the Bransford decision). “The expansion of smaller houses into significantly larger ones decreases the availability of would-be ‘starter’ homes in a community, perhaps excluding families of low to moderate income individuals.” Id. at 363 (Justices Cordy and Ireland dissenting).

Justice Cordy’s “relatively ‘affordable’” comment has been raised by many with reference to the requirements of the comprehensive permit statute. Mobile homes are relatively affordable, yet they do not count toward a municipality’s affordable housing stock. Dwelling units that sell at or below eighty percent of median income, but unencumbered by
The court’s interpretation of chapter 40B, section 20 in *Standerwick* allows an abutter to a comprehensive permit project to raise claims of injury with regard to the project’s impacts on the “health or safety of the occupants of the proposed housing or of the residents of the city or town” but not with regard to impacts to her property or her health or safety.\(^{65}\) The holding in *Standerwick* destroys an abutter’s statutory right of appeal by reducing to generalized—as opposed to particularized—her claims of injury; generalized claims of injury are not sufficient to confer standing.\(^{66}\) This outcome may have been intended:

> [W]e have no hesitation in concluding that granting standing to challenge the issuance of a comprehensive permit under G.L. c. 40B, § 21, to those who claim a diminution in the value of their property frustrates the intent of the Legislature. . . .

> . . . It would grant standing to challenge a comprehensive permit to persons who object to the construction of any affordable housing project simply by claims that the introduction of affordable housing for low and moderate income persons would cause their property values to drop.\(^{67}\)

No appraisal is required to conclude that the presence of a 115-unit apartment building abutting single-family dwellings in a rural portion of the community will cause the single-family dwellings to lose market value. Common sense alone suffices. That some of the dwell-


\(^{66}\) See *Standerwick*, 849 N.E.2d at 210–11 (“When the persons challenging a permit concede that they have nothing more than unfounded speculation to support their claims of injury, our law does not require that a developer come forward with expert evidence to challenge every such speculative injury.”).

\(^{67}\) *Id.* at 206.
ing units will be rented at affordable prices is irrelevant to the diminution of value. While it may be true that the inclusion of below-market-rate rental units will make the matter worse for the abutters, it cannot be reasonably disputed that the values of the abutting single-family dwellings will be dramatically impacted.  

Adding to the irony of Standerwick is the fact that, had Ms. Standerwick been an abutter to a 115-unit rental housing project permitted by special permit pursuant to the state zoning act and the town’s local zoning bylaw, her claims of property devaluation would have been sufficient to confer standing. It would have been the exact same project, yet it would have yielded a different result for Ms. Standerwick. A comprehensive permit project provides no opportunity for the abutter to assert property devaluation as grounds for standing to file litigation. A project permitted by zoning, of the exact same density—and including below-market-rate dwellings—allows the abutter to raise

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68 The effect of apartment buildings on single-family neighborhoods similar to the one at issue in Standerwick has been extensively discussed, but no empirical analysis exists regarding the impact a large rental housing project would have on abutting single-family properties. See generally Ingrid Gould Ellen et al., Does Federally Subsidized Rental Housing Depress Neighborhood Property Values? (N.Y. Univ. Law Sch. Working Paper, Paper No. 05-04, 2005), available at http://www.furmancenter.nyu.edu/publications/fedrentalC_march05ffr.pdf (discussing analysis of public housing project impacts on property values in New York City with citations to decades of previous investigations).


70 See Standerwick, 849 N.E.2d at 210–11.
property devaluation as grounds for injury.\textsuperscript{71} This discrepancy in results is untenable.\textsuperscript{72}

That Ms. Standerwick is barred from raising property devaluation as grounds of injury in an appeal of a comprehensive permit project, but is not barred from raising the same claim with regard to a project of the exact same size filed pursuant to local zoning, fails to satisfy the basic standard of rationality.\textsuperscript{73}

Even if the intent of the statute is to encourage or require cities and towns to ensure that each has at least ten percent of its housing stock set aside as affordable, the Standerwick court’s holding implicitly suggests that the town’s failure to reach the ten percent mandate is Ms. Standerwick’s fault. Only she and her fellow abutters will suffer the consequences of the town’s inability or unwillingness to achieve the state’s targets. Those in other parts of town might have sympathy for Ms. Standerwick and her neighbors, but more likely they will delight in silence knowing that Ms. Standerwick may very well have protected them from future comprehensive permit projects in their backyards.

There are those who suggest that Ms. Standerwick’s plight could have been avoided if the town had simply conformed to the statute’s


\textsuperscript{72} While the Vazza court recognized a home buyer’s financial investment, the Standerwick court may have overlooked a home buyer’s emotional investment. See discussion supra note 64. Compare Standerwick, 849 N.E.2d at 210–11 (deciding abutters do not have standing to challenge a comprehensive permit because their property values drop), with Vazza v. Bd. of Appeals of Brockton, 269 N.E.2d 270, 274 (Mass. 1971) (noting that buying a home is one of the largest purchases a person makes in her life, and so, she should be able to rely on applicable local zoning laws). The American dream of homeownership, though, must certainly be defined both as an emotional and a financial investment. See Yai Listokin, Confronting the Barriers to Native American Homeownership on Tribal Lands: The Case of the Navajo Partnership for Housing, 33 Urb. Law. 433, 445 (2001) (“Because they want to build on ancestral land that they will occupy for many years, the Navajo often wish to build a home that will meet their needs for a lifetime.”).

clear requirements—simply put—construct ten percent of the town’s housing stock as affordable. Such suggestions are wrong.\textsuperscript{74}

Remarkably, again, the SJC recently ruled that the longheld belief that achieving the Holy Grail of the comprehensive permit statute—ten percent of the housing stock being affordable—would not provide protection against new comprehensive permit projects. In Boothroyd \textit{v.} Zoning Board of Appeals of Amherst, the Court held that achieving the Holy Grail is not quite enough.\textsuperscript{75} Cities and towns must consider the regional need for affordable housing, even where the local needs are satisfied—i.e., the ten percent quota is reached.\textsuperscript{76}

The holding in \textit{Boothroyd} is further complicated by the courts’ prior decisions making clear that a comprehensive permit applicant is without appeal to the Housing Appeals Committee in cities or towns that are consistent with local needs.\textsuperscript{77} These holdings explicitly suggest to municipalities that once the goal has been achieved, neighborhoods can thereafter be protected from the ruleless process that defines the statute.

The SJC reiterated that chapter 40B was a “particularized solution,” crafted by the Massachusetts Legislature to address its concern that cities and towns would use their zoning powers to exclude low- and moderate-income groups.\textsuperscript{78} The Legislature was concerned “with ensuring that every city and town in the Commonwealth [had] available a certain minimum amount of affordable housing stock.”\textsuperscript{79} Chap-

\textsuperscript{74} See Boothroyd \textit{v.} Zoning Bd. of Appeals of Amherst, 868 N.E.2d 83, 88–89 (Mass. 2007).

\textsuperscript{75} Id. This fact highlights the regressive and absurd impact of the statute. Progressive cities and towns, theoretically, will achieve the state’s mandate while “snob” communities will not. Is it the abutter’s fault, as in the case of \textit{Standerwick}, that the town’s leadership and legislative body consists of snobs? Even if the abutter is not a snob herself, she suffers the consequences and is without options. Other than simply accepting her fate, the abutter’s other choice is to move to a nonsnob community, leaving the community of snobs behind. As discussed in this Part, however, the nonsnob community is responsible for the housing the snob communities have failed to produce. See \textit{id}. Simply put, the abutter can find no safe harbor from the ravages of the comprehensive permit statute, regardless of where she lives in Massachusetts.

\textsuperscript{76} Id.

\textsuperscript{77} See, e.g., Zoning Bd. of Appeals of Greenfield \textit{v.} Hous. Appeals Comm., 446 N.E.2d 748, 750–51 (Mass. App. Ct. 1983) (“[The Housing Appeals Committee] cannot order the issuance of a comprehensive permit . . . where the locality has fulfilled its minimum low or moderate income housing obligation under one of the criteria set forth in G.L. c. 40B, § 20.”).


\textsuperscript{79} Id.
ter 40B thus “reflects the Legislature’s careful balance between leaving to local authorities their well-recognized autonomy generally to establish local zoning requirements, while foreclosing municipalities from obstructing the building of a minimum level of [affordable] housing.” 80 To maintain this “careful balance,” the Legislature enacted a scheme in which a city or town’s autonomy may be overruled only where the municipality has failed to provide the minimum requirements of affordable housing as defined by the statute.

[C]entral to the legislative scheme is the requirement that an override of local zoning authority’s decision to deny an application to build affordable housing is available only to the extent that a city or town has not met its share of affordable housing units as delineated in the Act. Once a town has met its minimum obligations, local zoning requirements are deemed “consistent with local needs,” and the [Housing Appeals Committee] is without authority to order a local zoning board to issue a comprehensive permit. To the extent that a city or town does not have an adequate supply of affordable housing (measured in the Act as a percentage of existing housing or of land in each town) its local autonomy in zoning matters is curtailed. Once its obligation is met, the override power delegated to the [Committee] is extinguished. 81

This statutory scheme—in which a municipality satisfying certain minimum affordable housing requirements retains authority to deny or condition comprehensive permits—arguably realizes and affects chapter 40B’s multiple goals. Chapter 40B is concerned not only with the creation of affordable housing, but also with a municipality’s particularized planning responsibilities: “the need to protect the health or safety of the occupants of the proposed housing or of the residents of the city or town, to promote better site and building design in relation to the surroundings, or to preserve open spaces.” 82

The SJC has noted that “the interest in the provision of critically needed affordable housing must be balanced against the statutorily authorized interests in the protection of the safety and health of the

80 Id. at 592–93 (footnote omitted) (citation omitted).
81 Id. at 593 (footnotes omitted) (emphasis added); see Zoning Bd. of Appeals of Greenfield, 446 N.E.2d at 750–51.
town’s residents, development of improved site and building design, and preservation of open space.”

Note, however, that while the comprehensive permit applicant is without appeal to the Housing Appeals Committee, being consistent with local needs does little to protect the community from the continued anarchy imposed by the statute. Moreover, the holding in *Boothroyd* defeats one of the very incentives of the statute—the development of affordable housing in accordance with a long-range plan.

Allowing—or perhaps ensuring—that cities and towns continually approve comprehensive permits may be pragmatically important given that achieving the “consistent with local need” standard is fleeting. Once obtained it is easily and promptly lost as each market-rate dwelling unit approved puts the community further behind in its quota. Left open for analysis is the equity to the abutters of future comprehensive permit projects.

These abutters—and we are all abutters—should be able to rely on their community’s achievement of the statutory Holy Grail, thereby turning to zoning and other locally adopted land-use controls to guide the community’s future, but they cannot. The abutter to open lands, built-upon lands, or underutilized lands has no knowledge of what will occur on the property next door. This is a perplexing result given the SJC’s holding in *Vazza v. Board of Appeals of Brockton*.

As discussed below, it cannot be fairly argued that the statute merely reinforces home rule, that is, that boards of appeals are simply exercising their authority pursuant to local concerns. First, the statute mandates compliance with the comprehensive permit formulas. Compliance with these formulas could hardly be labeled as an exercise of home rule authority. Worse, the statute allows a board of appeals to

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83 Standerwick v. Zoning Bd. of Appeals of Andover, 849 N.E.2d 197, 206 (Mass. 2006); see also Bd. of Appeals of Hanover, 294 N.E.2d at 413.
84 *Bd. of Appeals of Hanover*, 294 N.E.2d at 413 (noting the alternative definitions of consistency with local needs in chapter 40B, section 20 “define precisely the municipality’s minimum housing obligations ‘under the statute and permit it to do some intelligent, long-range planning about how and where the necessary housing shall be built’” (quoting Allan G. Rodgers, *Snob Zoning in Massachusetts*, 1970 Ann. Surv. of Mass. L. 487, 490)).
85 *Boothroyd v. Zoning Bd. of Appeals of Amherst*, 868 N.E.2d 83, 89 (Mass. 2007) (“A municipality’s attainment of its minimum affordable housing obligation in many cases does not eliminate the need for affordable housing within its borders. . . Application of the regional needs test, however, ensures that local boards of appeal will balance the competing considerations involved.”).
86 *See* discussion supra note 64.
continually grant comprehensive permit approvals without any standards, guidelines, or rational objectives, except for the production of new housing units. Lastly, and unfortunately, members of the board of appeals, dutifully complying with the statute’s endless requirement to become consistent with local needs and remain compliant, are under relentless pressure to continue to approve comprehensive permit projects.\footnote{Psychologist Stanley Milgram wrote:

The essence of obedience is that a person comes to view himself as the instrument for carrying out another person’s wishes, and he therefore no longer regards himself as responsible for the actions. Once this critical shift of viewpoint has occurred, all of the essential features of obedience follow. . . .

. . . .

. . . . This may illustrate a dangerously typical arrangement in a complex society: it is easy to ignore responsibility when one is only an intermediate link in a chain of actions.


Following \textit{Boothroyd} and \textit{Standerwick}, the plight of Ms. Standerwick and countless other abutters throughout the state has become more tenuous when the town is consistent with local needs. Ms. Standerwick cannot raise property devaluation as grounds to appeal the issuance of a comprehensive permit notwithstanding that the town has met its statutory obligations. Second, and worse yet, Ms. Standerwick is now responsible to ensure satisfaction of an undefined and undefinable regional housing need. At least where the community was not consistent with local needs, the measurement of inconsistency was the municipality itself. Post-\textit{Standerwick}, the SJC has introduced a new and utterly unattainable standard.

Neither the \textit{Boothroyd} court nor the statute provides guidance as to how to measure the regional need for affordable housing. Given the SJC’s deference to the Housing Appeals Committee in the Committee’s interpretation of its own regulations, it cannot be reasonably predicted how far the Committee will go in defining regional housing needs. But, if past practice is any guide, the Housing Appeals Committee will go far to ensure that the ends trump the means, and regional housing needs will be broadly and grossly interpreted. For example, will Ms. Standerwick and her neighbors be responsible for the regional housing needs of Andover and its neighboring communities, the Boston metropolitan area, eastern Massachusetts, or the entire Commonwealth? A cynic might even suggest that it is not beyond the Housing Appeals Commit-
tee to define the Commonwealth’s regional housing needs as including the five additional states in the New England region. 89

In a state that has all but abolished regional governments, 90 the SJC’s reference to regional consideration is unfortunately analogous to the plight of greyhounds chasing the dog track’s mechanical rabbit. While the greyhound is led to believe it can catch the rabbit, and it never does, in a similarly deceptive fashion, municipalities and their residents have been led to believe that they can achieve the ten percent threshold and the race will be over. 91

III. THE REPEAL OF CHAPTER 40B, SECTIONS 20 TO 23

The comprehensive permit statute cannot be reformed; it must be repealed. 92 Reformation efforts, like rearranging deck chairs on the

89 As the Commonwealth’s cities and towns have all but achieved the Legislature’s purported goal of ten percent subsidized housing when viewed statewide, the Housing Appeals Committee would need to look beyond the state’s borders to argue that the regional need for subsidized housing outweighs the abolition of local land-use controls. The total number of housing units in the Commonwealth is 2,526,963 and the number of dwelling units that count is 241,650. See SHI, supra note 23. Accordingly, 9.6% of the Commonwealth’s housing stock meets DHCD’s arbitrary definition of affordable. Id.


91 Boothroyd v. Zoning Bd. of Appeals of Amherst, 868 N.E.2d 83, 89 (Mass. 2007) (“Finally, our conclusion does not ‘needlessly infringe[]’ on the ‘settled property rights of abutters.’ Rather, our conclusion takes into account that the Legislature ‘has clearly delineated that point where local interests must yield to the general public need for housing.’” (quoting Bd. of Appeals of Hanover v. Hous. Appeals Comm., 294 N.E.2d 393, 423 (Mass. 1973))). Under the existing statutory scheme, the municipality will never be in compliance.

92 Not satisfied with the damage wrought by the comprehensive permit statute, the legislature adopted several “smart growth” laws in 2005 and 2006. See MASS. GEN. LAWS ch. 40R (2006); MASS. GEN. LAWS ch. 40S (2006). A critique of these laws is beyond the scope of this Article, except to add that none of the Commonwealth’s regulatory efforts to increase density through “smart growth” or “transit-oriented developments” contain reciprocal offsets for the preservation of open space elsewhere in the Commonwealth. See MASS. GEN. LAWS ch. 40R; MASS. GEN. LAWS ch. 40S. While it may seem smart to intensify the densities of existing neighborhoods by granting developers “streamlined permitting procedures,” as described in Massachusetts General Law chapter 43D, there is nothing smart about quadrupling densities in one neighborhood without requiring the beneficiary developer to protect development rights elsewhere in the community or region. See MASS. GEN. LAWS ch. 40R; MASS. GEN. LAWS ch. 40S; MASS. GEN. LAWS ch. 43D (2006). These laws permit a city or town lawfully to adopt spot zoning districts that, thereafter, are under
Titanic prior to its sinking, will do little to promote affordable housing and protect due process principles. What portions of the statute can be reformed? Reduce the ten percent goal? Require “Adult Supervision” by state agencies? Establish maximum densities? Prohibit commercial development within a comprehensive permit application? Ensure that abutters have the right of appeal consistent with normative land-use practices? Delete the limited dividend organization as a viable ap-

the control of the DHCD. The districts allow for high-density development as a premise for creating smart growth but neither promise nor are capable of delivering a corresponding off-set of land preserved elsewhere in the community—or the Commonwealth—in exchange for the densities allowed in the smart growth district.

One author wrote of people living on the Gulf Coast after Hurricane Katrina:

There are, for example, several thousand Vietnamese in Biloxi: they came to work on the shrimp boats and stayed to build houses and raise families. According to Uyen Le, who works for a Vietnamese community organization, many of them left behind a world where only poor people walk everywhere and a car is a sign of success. “That’s the American dream: you get your own lot, and you get your own little house, and you get your own car,” she explained. “And now you’re talking about these walkable neighborhoods, and some people will say, ‘I came to America so I could drive.’” Some of these New Urbanist ideas don’t really match up for this area.


93 For example, the Legislature could establish a lower threshold, such as five percent of the housing units in the community must be subsidized.


95 For example, the Legislature could allow a maximum density of no greater than two times the underlying zoning within the locus on which the project is proposed.

96 For example, the Legislature could prohibit such mixed uses without local legislative zoning approval. Unless the local legislative body desires to site nonresidential uses within a comprehensive permit project and adopts zoning that affirmatively permits the same, the authority to destroy existing neighborhoods cannot be delegated to the board of appeals and, thereafter, the Housing Appeals Committee.

97 For example, the Legislature could affirmatively reverse the holding of Standerwick v. Zoning Board of Appeals of Andover by legislative enactment. See 849 N.E.2d 197, 210–11 (Mass. 2006).
plicant?98 While each of the above assurances would make the statute more equitable, they do nothing to fix its core flaw: the complete lack of integration among municipal competing interests and critical concerns. Only by combining these core, competing, and critical concerns into a comprehensive document—a plan—can the statute’s fatal flaws be resolved.

In recognition that the statute is irreparably flawed, ten citizens of the Commonwealth filed a petition in the summer of 2007 with the Massachusetts Attorney General seeking to repeal the statute.99 Although the petition was certified by the Massachusetts Attorney General, and over 70,000 signatures were obtained,100 the Secretary of State refused to certify over half of the signatures due to stray marks found on the petition.101 Upon resubmission of the petition in 2009, it is anticipated that the numerous organizations represented by counsel (40B advocates)102 that fought the Attorney General’s certification will, once again, restate their argument that repeal of the statute will constitute a regulatory taking and, therefore, will violate the Massachusetts Constitution.103 They argue, incorrectly, that the initiative petition violated

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98 For example, the Legislature could remove the for-profit developer as a qualified entity that may apply for a comprehensive permit.


103 See Mass. Const. amend. art. 48, § 2. Article 48, section 2 of the Massachusetts Constitution prohibits an initiative petition from including the following:

No measure that relates to religion, religious practices or religious institutions; or to the appointment, qualification, tenure, removal, recall or compensation of judges; or to the reversal of a judicial decision; or to the powers, creation or abolition of courts; or the operation of which is restricted to a particular town, city or other political division or to particular districts or localities of the commonwealth; or that makes a specific appropriation of money from the treasury of the commonwealth, shall be proposed by an initiative petition; but if a law approved by the people is not repealed, the gen-
Article 48 of the Massachusetts Constitution as it would affect a taking of property without compensation to comprehensive permit holders who do not obtain building permits as of January 1, 2009.\footnote{104}

While the Attorney General rejected the 40B advocates’ position and certified the initiative petition,\footnote{105} it is anticipated that the 40B advocates would appeal any recertification by the Attorney General. The SJC should reject any such challenge to the initiative petition.

A. A Regulatory Taking Is Well-Defined: The Petition Does Not Constitute a Regulatory Taking

A regulatory taking resulting from a government’s legislative action does not occur unless: (1) the legislation results in a permanent physical occupation of private property,\footnote{106} and/or (2) the legislative action leaves a landowner with no reasonable economic value or use.\footnote{107}

\begin{quote}
Id.\footnote{104} The initiative petition states:

Be it enacted by the People, and by their authority:

SECTION 1: Chapter 40B, sections 20 through 23, inclusive of the General Laws are hereby repealed.

SECTION 2: No provision of this act shall be interpreted as applying to, affecting, amending, or otherwise impairing the provisions of any project approved by a board of appeals or the Housing Appeals Committee pursuant to G.L. c.40B, s.20–23 before the effective date of this Act, provided that said project has been issued a building permit pursuant to the State Building Code for at least one (1) dwelling unit.

SECTION 3: The provisions of this act are severable, and if any provision of this act is found to be unconstitutional, contrary to law, or otherwise invalid by a court of competent jurisdiction, then the other provisions of this act shall continue to be in effect.

SECTION 4: This act shall take effect January 1, 2009.

Initiative Petition, supra note 99 (emphasis added) (formatting omitted).
\end{quote}

\footnote{105} See Letter from Peter Sacks, supra note 102.

\footnote{106} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 421 (1982). The determination of whether government’s actions constitute a regulatory taking where adjudicative decisions are under review, which is not the case here—e.g., those where the landowner claims that government has worked a regulatory taking by imposing unreasonable conditions as a quid pro quo for the grant of a special permit or variance—are governed by the “nexus” and “proportionality” tests established by the Supreme Court in a long line of cases and commentary including Nollan v. California Coastal Commission, 483 U.S. 825 (1987), and Dolan v. City of Tigard, 512 U.S. 374 (1994).

A regulatory taking has been held to have occurred where the government’s actions result in a permanent physical occupation of private property.\textsuperscript{108} The 40B advocates did not suggest that the initiative petition would result in the permanent physical occupation of private property. Thus the first possible prong of a regulatory takings analysis is not implicated by the petition.

The 40B advocates do argue, however, the second possible prong of regulatory takings analysis that the initiative petition would result in a taking with respect to comprehensive permit holders who did not obtain building permits by the effective date of January 1, 2009. A regulatory taking does not exist unless it effectively deprives the landowner of all economically beneficial or viable use of the land.\textsuperscript{109} To establish a regulatory taking, the 40B advocates must demonstrate that the repeal of the statute leaves the property “economically idle” and that the plaintiff retains no more than a “token” interest.”\textsuperscript{110}

The loss of one property interest among a bundle of property rights does not, alone, constitute a taking, even if that one property right, and the economic value associated with it, is completely eliminated.\textsuperscript{111} This principle is often referred to as the “whole parcel doctrine.”\textsuperscript{112} Moreover, the fact that the challenged regulation was enacted after the landowner’s acquisition of the property does not alter the outcome.\textsuperscript{113}

\begin{flushright}
\textsuperscript{108} Lorretto, 458 U.S. at 421.
\textsuperscript{109} E.g., Lucas, 505 U.S. at 1017; U.S. Gypsum Co., 867 N.E.2d at 776–77; Zanghi, 807 N.E.2d at 224.
\textsuperscript{113} See Gove, 831 N.E.2d at 867 (deciding a bylaw prohibiting construction of a single-family house on lot in a flood plain was not a regulatory taking, even though owner had acquired the lot years prior to the adoption of the bylaw); Long Cove Club Assocs. v. Town of Hilton Head Island, 458 S.E.2d 757, 758 (S.C. 1995) (noting rezoning that nullified pre-existing “Development Permit” did not constitute a taking); Flynn v. City of Cambridge, 418 N.E.2d 335, 339–40 (Mass. 1981) (concluding that adoption of a condominium conversion ordinance was not a taking, even as to owners whose units were purchased prior to the effective date of the ordinance).
\end{flushright}
B. Chapter 40B Creates No Vested Rights

The 40B advocates argue that the issuance of a comprehensive permit endows the holder with certain vested rights or vested property interests equivalent to those created under chapter 40A.114

The vested rights referenced—such as those pertaining to special permits and subdivision plans—are creatures of statute.115 That is, they are defined by statute, and their protections afforded only to those specific circumstances described in the statute.116 There exists no comparable language in any section of chapter 40B creating a vested right in an issued comprehensive permit. Absent specific language establishing such rights under chapter 40B, none can be inferred. Expressio unius est exclusion alterius.117

Moreover, the Commonwealth’s appellate courts have made it abundantly clear that protections created under chapter 40A cannot be imported into chapter 40B, where chapter 40B does not contain the specific language creating such protections.118

Had the Legislature intended to provide comprehensive permit recipients with the vested rights enumerated under chapter 40A, it would have done so—either in the original enactment of chapter 40B or by amendment. The Legislature is “‘presumed to understand and intend all consequences’ of its acts,”119 and “to be aware of existing

115 See id.
116 See id. (enumerating specifically zoning protection for: (1) building or uses “lawfully in existence or lawfully begun”; (2) special permits issued prior to an advertisement for a zoning change; (3) undersized lots of “at least five thousand square feet of area and fifty feet of frontage”; (4) up to three undersized lots held in common ownership of “at least seven thousand five hundred square feet of area and seventy-five feet of frontage”; (5) preliminary subdivision plans of land; (6) definitive subdivision plans of land; and (7) use freezes for approval not required plans).
118 See, e.g., Planning Bd. of Hingham v. Hingham Campus, LLC, 780 N.E.2d 902, 905 (Mass. 2003) (deciding it was “improper” to consider standing under chapter 40A where the permit issued under chapter 40B); Cardwell v. Bd. of Appeals of Woburn, 807 N.E.2d 207, 210–11 (Mass. App. Ct. 2004) (emphasizing that provision for constructive approval found in chapter 40A cannot be imported into chapter 40B); see also Standerwick v. Zoning Bd. of Appeals of Andover, 849 N.E.2d 197, 204, 210–11 (Mass. 2006) (noting “interests protected by G.L. c. 40B differ from, and in some respects are inconsistent with, those protected by G.L. c. 40A,” including the remarkable holding that standing claims differ with respect to 40A and 40B projects).
statutes when it amends a statute or enacts a new one.” Although the 40B advocates suggest that the provisions of chapter 40A apply by analogy to chapter 40B—or that they provide a parallel to chapter 40B—the courts have held otherwise.

Further support for the argument that possession of a comprehensive permit does not constitute a vested right is found throughout decisions of the Housing Appeals Committee. First, as the Committee has repeatedly held that “the comprehensive permit itself is preliminary,” the permit is based solely on preliminary drawings and plans.

Second, a comprehensive permit: (1) as required by 760 Mass. Code Regs. 56.07(5)(b), may not permit “the building or operation of housing . . . less safe than the applicable building and site plan requirements of the subsidizing agency”; (2) as required by 760 Mass. Code Regs. 56.04(7), necessitates approval from the “designated entity that issued the Project Eligibility . . . determination”; and (3) as required by chapter 40B, section 20, 760 Mass. Code Regs. 56.04(1)(b) cannot be used and is not effective without the issuance of a federal

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121 E.g., Oxford Hous. Auth., No. 90-12, slip op. at 4 (Mass. Housing Appeals Comm. Nov. 18, 1991) (involving the Oxford Zoning Board of Appeals). The Housing Appeals Committee stated:

The adequacy of the design work done by a developer, which is normally reflected in architectural or engineering plans, is frequently questioned before this Committee. Since this sort of challenge is often based on a misunderstanding of the requirements under our regulations, we will describe the scheme envisioned by the statute and regulations in some detail, in the hope of laying this issue to rest.

Beginning with its earliest cases, the Committee has made it clear that plans submitted for comprehensive permit approval are preliminary . . . . The rationale for this rule is that the comprehensive permit itself is preliminary in the sense that no construction can proceed until a building permit has been issued. The building permit is not issued until the appropriate officials have reviewed final construction drawings and insured that the project will comply with various state codes and all local requirements not waived by the comprehensive permit.

122 760 MASS. CODE REGS. 56.07(5)(b).
123 Id. at 56.04(7).
or state subsidy to the developer.\textsuperscript{124} Many federal or state subsidies, such as the Low-Income Housing Tax Credit program,\textsuperscript{125} are highly competitive and available to only a limited pool of applicants and only during a limited period each calendar year.

Third, a comprehensive permit expires by its own terms if construction authorized by the comprehensive permit has not begun by the date set by the local board of appeals or Housing Appeals Committee.\textsuperscript{126}

Receipt of a comprehensive permit cannot be said to create, categorically, vested rights. The statute and the applicable regulations impose nominal filing requirements, subject the applicant to numerous and discretionary conditions imposed subsequent to receipt of the comprehensive permit, and leave the recipient subject to the unbridled authority of the subsidizing agency to grant a required subsidy and the local board of appeals to place any expiration date it chooses on a comprehensive permit.

C. The Ad Hoc, Fact-Based Inquiry Entailed in Regulatory Takings Analysis Is Beyond the Scope of the Attorney General and SJC’s Review of the Initiative Petition

In Yankee Atomic Electric Co. v. Secretary of the Commonwealth (Yankee Two), the SJC considered the question of whether the Attorney General had correctly certified an initiative petition seeking to prohibit generation of electric power by commercial nuclear power plants in Massachusetts.\textsuperscript{127} The Attorney General’s certification of the petition had been challenged by the two nuclear power plant companies then operating in Massachusetts, that argued that the petition would effect a regulatory taking and would violate Article 48 of the Massachusetts Constitution.\textsuperscript{128} The SJC had issued a decision previously on this case (Yankee One), ordering the Attorney General to conduct a limited ex-


\textsuperscript{125} See 760 MASS. CODE REGS. 54.01–.16 (2000).

\textsuperscript{126} See id. at 56.05(12)(c); see also Forestview Estates Assocs., Inc., No. 05-23, slip op. at 7–8 (Mass. Housing Appeals Committee Mar. 5, 2007) (concluding that a comprehensive permit lapsed pursuant to 760 Mass. Code Regs. 31.08(4), now 760 Mass. Code Regs. 56.05(12)(c), where the holder did not seek an extension of the permit prior to it lapsing) (involving the Douglas Board of Appeals).

\textsuperscript{127} Yankee Atomic Electric Co. v. Secretary of the Commonwealth (Yankee Two), 526 N.E.2d 1246, 1247 (Mass. 1988).

\textsuperscript{128} Id.
amination of the facts relating to the initiative petition. The Attorney General did so and affirmed his certification, concluding “that the petition [did] not establish, on its face, that it effects a regulatory taking.” In upholding the certification, the SJC held that due to the ad hoc and fact-dependent nature of regulatory takings analysis, the Attorney General’s inquiry was to be limited.

_Yankee Two_ is highly instructive, if not dispositive of the initiative petition to repeal chapter 40B. As with the petition in _Yankee Two_, the initiative petition proposes “not a permanent physical occupation or confiscation of property, but instead a regulation of use of property,” and “[a]s such the question is whether the ‘regulation goes too far.’” As the SJC noted, answering the question of whether a regulation “goes too far” involves regulatory takings analysis which is “peculiarly fact dependent, involving ‘essentially ad hoc, factual inquiries.’” Under _Yankee Two_, the issues in the initiative petition—whether the potential nullification of a comprehensive permit “goes too far,” and thus whether a taking of property will occur—“will involve the kind of lengthy factual determination which [Article] 48 does not require or allow to the Attorney General at this time.”

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130 _Yankee Two_, 526 N.E.2d at 1248.
131 _Id._ at 1249–50.

Our review . . . reveals issues (1) which are relevant to the question whether a taking would ensue from the proposed legislation, and (2) which have not been, and should not be, determined through the Attorney General’s limited examination of the facts at this time. The petition proposes not a permanent physical occupation or confiscation of property, but instead a regulation of use of property. As such the question is whether the “regulation goes too far.” Answering this question involves regulatory takings analysis which is peculiarly fact dependent, involving “essentially ad hoc, factual inquiries.” We conclude that at least some of the relevant inquiries which may arise in the ultimate determination whether a taking of property has occurred will involve the kind of lengthy factual determination which art. 48 does not require or allow to the Attorney General at this time.

_Id._ (citations omitted).
132 _Id._ (citation omitted) (quoting Pa. Coal Co. v. Mahon, 260 U.S. 393, 415 (1922)).
134 _Id._
IV. AFTER CHAPTER 40B, SECTIONS 20 TO 23: A RECIPE FOR BUILDING AFFORDABLE HOUSING IN MASSACHUSETTS

The comprehensive permit statute relies on tired and worn innuendo—opponents of 40B projects are “NIMBYs” and “snobs”—and has been driven for thirty-eight years by real estate developers and others who have long fed at the “pig fest,” as described by the Commonwealth’s Inspector General. The statute is punitive; it obliterates all local land-use, fiscal, and planning control; it ignores the countless other critical issues facing cities and towns today; and it imposes a one-size-fits-all policy that insults the distinctions between Cape Cod and Cape Ann, the Berkshires and the Blackstone Valley.

Although cloaked in unassailable objectives, such as assisting returning Vietnam veterans find housing, the statute remains a perverse attempt to cram city-like densities, building types, and large-scale infrastructure into suburban and rural towns. It has no roots in sound land-use planning principles, no counterpart anywhere else in the nation, and results in the destruction of neighborhoods, marginal lands,

135 Christine McConville, Profits Probed in Housing Program, Boston Globe, Oct. 10, 2006, at A1. The Inspector General’s “pig fest” remarks signaled the beginnings of a thorough investigation into the imbedded corruption of the comprehensive permit process. Id. Most recently, in testimony before a Massachusetts Senate and House Joint Committee on Housing, Inspector General Gregory W. Sullivan stated, “This 40B scandal represents one of the biggest abuses in state history, in my opinion, in terms of dollars and lack of oversight. Now we have new people in charge under the administration. We’re calling for Adult Supervision to come in and rectify these problems.” Testimony, supra note 94; see also Letter from Gregory W. Sullivan, Inspector Gen., to Susan Tucker, Senate Chair, Joint Comm. on Hous., and Kevin Honan, House Chair, Joint Comm. on Hous. (Oct. 23, 2007), available at http://www.mass.gov/ig/publ/40b_hearing_letter.pdf.

136 Currently, the regulations state that the avowed purpose is to “reduce regulatory barriers that impede development of such housing.” 760 Mass. Code Regs. 56.01. The goal of “reduce[ing] regulatory barriers” curiously comports with the mission statement and goals of the development community and their agents, perhaps explaining why the DHCD is derisively referred to as the “Department of Housing and its Community of Developers.” See AvalonBay Communities, Inc., Community Profile, http://www.avalonbay.com/Template.cfm?Section=CompanyProfile (last visited Mar. 27, 2008) (“AvalonBay Communities, Inc. is in the business of developing, redeveloping, acquiring and managing high-quality apartment communities in the high barrier-to-entry markets of the United States.”); see also NAHB, National Association of Home Builders, Barriers to Affordable Housing, http://www.nahb.org/generic.aspx?genericContentID=3516 (last visited March 27, 2008) (“Overcoming obstacles such as outdated and overly restrictive zoning, and inadequate infrastructure, tax issues, and land availability need to be addressed.”); NGA CTR. FOR BEST PRACTICES, ISSUE BRIEF, INTEGRATING AFFORDABLE HOUSING WITH STATE DEVELOPMENT POLICY, http://www.nga.org/cda/files/0411AFFORDABLEHOUSING.pdf (last visited March 27, 2008) (“[Chapter 40B, sections 20 to 23] aim[] to encourage the development of affordable housing by reducing the barriers created by local approval processes, local zoning, and other restrictions.”).
and any rational reason for why local residents would ever again attend
town or city council meetings to adopt or support land-use regulations.

It is not disputed that chapter 40B results in the construction of new housing. But at what cost? The Commonwealth could have safer roads and cleaner water if the income tax rate were doubled, but it is
doubtful that such action would be tolerated. The ends do not justify
the means in a democratic society, yet 40B remains the ultimate ends
versus means legislation—but not for long.

The answer to what is next is easy. Massachusetts must join with
the numerous other states that have adopted comprehensive land-use
planning legislation that enables cities and towns to impose, among
other things, inclusionary zoning requirements and to collect impact
fees. States as diverse as California, Maryland, and Rhode Island
build more affordable housing units than Massachusetts
through burden sharing between the developer and the community.
Unlike chapter 40B—which is nothing more than a gift of tax-
payer dollars to private developers—inclusionary zoning, impact fees,

137 See Witten, supra note 19, at 546–51.
138 See generally Cal. Coal. for Rural Hous., Non-Profit Hous. Ass’n of N. Cal., In-
clusionary Housing in California: 30 Years of Innovation (2003), available at http://
www.oaklandnet.com/BlueRibbonCommission/PDFs/BlueRibbon10-NPH.pdf (providing
a detailed discussion of California’s inclusionary zoning practices).
139 See Montgomery County, Maryland, Department of Housing & Community Affairs,
Moderately Priced Dwelling Unit (MPDU) Program in Montgomery County, Maryland,
http://www.montgomerycountymd.gov/dhctmpl.asp?url=/content/dhca/housi-
ng_p/mpdu/Summary_new.asp (last visited Mar. 27, 2008).
140 R.I. Gen. Laws § 45-22.2-6 (2007) (comprehensive planning rules include a re-
quirement for the planning for and production of affordable housing and penalties for
failure to produce affordable housing consistent with the plan); R.I. Gen. Laws § 45-53-1
141 40B advocates, most notably CHAPA, relentlessly tout the accomplishments of the
statute. See Citizens’ Housing & Planning Association, supra note 39, at 1 (stating that
26,000 affordable homes were created since the early 1970s using chapter 40B). In com-
parison, Montgomery County, Maryland’s inclusionary housing ordinance has resulted in
the creation of over 11,500 affordable dwelling units in the County. Nicholas Brunick,
Bus. and Prof’l People for the Pub. Interest, The Impact of Inclusionary Zoning

In fact, in many communities, development under inclusionary zoning has
continued so robustly that it has led local officials to consider slowing develop-
ment in the interest of protecting rural and open space. In Loudon County,
Virginia, the nation’s fourth fastest growing county, the decade-old inclusionary
zoning program was recently amended because it was producing so much new
construction that local officials were concerned about its effect on Loudon’s
shrinking amounts of rural countryside.

Id. at 6–7.
and development agreements require developers to participate in the creation of affordable housing, not just profit from it.

The repeal of the statute provides an opportunity for the Commonwealth to adopt meaningful planning and regulatory provisions that require cities and towns to plan for—and build—affordable housing in a manner that is consistent with local and regional plans. These plans will finally incorporate other key municipal concerns into a comprehensive plan for the community. Development of housing will be a required element of city and town plans, but not the only element. Cities and towns will be free to plan for construction of rental and for-sale housing, housing for those earning well below eighty percent of the state’s median income, and housing for family members within existing dwellings, without fear of retribution from developers who are offered a blank check by the Commonwealth’s DHCD.

V. The Plan

An underlying premise of this Article is that the establishment of a comprehensive planning process for the Commonwealth’s cities and towns, whether it is to promote affordable housing production or convenient road systems, should no longer be debated. Academic and professional literature is replete with juried discussions highlighting the benefits and logic of the preparation by cities and towns of comprehensive plans linking those plans to the regulations designed to make them work.⁴² Lengthy repetition of this process should no longer be necessary.

A. The Planning Requirement

Cities and towns would be required to adopt a comprehensive plan within a prescribed period of time—such as three years—following the adoption of the planning legislation by the Legislature. The plan would be required to include no less than the state-mandated planning elements—e.g., housing, open space, recreation, public safety, infrastructure, finance, etc.—and could include optional elements chosen by the municipality—such as noise. The plan would be required to identify the mechanisms and a timeframe for implementation of the plan’s

⁴² See, e.g., 83 Am. Jur. 2d Zoning and Planning § 22 (1992) (legal effect of adopting comprehensive plan); Bobrowski, supra note 28; Curtin & Witten, supra note 15; Charles M. Haar, In Accordance with a Comprehensive Plan, 68 Harv. L. Rev. 1154 (1955); Sullivan & Michel, supra note 16.
elements and the minimum requirements set by statute.\textsuperscript{143} The plan’s elements would be required to be horizontally consistent, and, as discussed below, vertically consistent.\textsuperscript{144} The plan would be certified by a state planning agency for consistency with the state-mandated planning elements. The plan would be required to be updated at least every five years, but no more often than three times per year.\textsuperscript{145}

B. Tools for Implementing the Plan

Zoning and other land-use controls would be required to be consistent with the plan. Cities and towns would have the authority to adopt impact fees,\textsuperscript{146} transfer development rights,\textsuperscript{147} enter into development agreements,\textsuperscript{148} and adopt inclusionary zoning\textsuperscript{149} requirements,

\textsuperscript{143} For example, the statute would establish a minimum percentage of land area to be set aside in cities and towns for rental housing and/or for-sale housing. Cities and towns would be required to produce a specified number of dwelling units for rent or sale to those earning specified percentages of median income. Cities and towns would have a period of time within which to demonstrate compliance with the statute and the adopted plan. Similarly, the statute could establish a minimum percentage of land area to be set aside for such uses as recreational opportunities, permanent open space protection, commercial and industrial development.

\textsuperscript{144} See infra Part V.B.

\textsuperscript{145} See Cal. Gov’t Code § 65,358(b) (West 1997 & Supp. 2008) (limiting the number of times the mandatory elements within a comprehensive plan may be revised).

\textsuperscript{146} Impact fees allow a municipality to collect fees for the proportionate impact of new development. See, e.g., Witten, supra note 19, at 546 n.147.

\textsuperscript{147} Transfers of development rights allow a municipality or group of communities to authorize the transfer of development rights from one parcel to another, with the transferor parcel being subject to a permanent restriction against additional development. See generally Suitum v. Tahoe Reg’l Planning Agency, 520 U.S. 725 (1997); Fred F. French Investing Co. v. City of New York, 39 N.Y.2d 587; Rick Pruetz & Angela Pruetz, Transfer of Development Rights Turns 40, PLANNING & ENVT'L. L., June 2007, at 3 (presenting background information on transfers of development rights and examples of success stories); Sarah J. Stevenson, Note, Banking on TDRs: The Government’s Role as Banker of Transferable Development Rights, 73 N.Y.U. L. Rev. 1329 (1998) (discussing the Suitum case and, specifically, the role of banks in transfers of development rights).

\textsuperscript{148} Development agreements allow a municipality to contract with a land developer for public benefits in exchange for granting the developer protection against changes in applicable land-use regulations. See generally Schwartz, supra note 24 (providing a detailed discussion of development agreements).

\textsuperscript{149} Inclusionary zoning requires a developer of land to provide affordable housing units—rental or sale—or pay fees in lieu of the units as a cost associated with the creation of new market-rate units. Unlike the comprehensive permit statute, which is a gift of density without any reciprocal costs to the developer, inclusionary housing regulations ensure that impacts of new market-rate land development are offset by the creation of affordable housing units. Inclusionary zoning statutes have been extraordinarily successful throughout the country. Such statutes have been upheld by appellate courts in various states and, perhaps most importantly, produce affordable housing without destroying local plans,
such that at least some of the costs of development would be borne by
the developer and not, as is currently the case, solely by the commu-
nity.\textsuperscript{150} The zoning act would be revised, holistically, to require vertical
consistency with adopted plans,\textsuperscript{151} remove the broad vested rights pro-
visions found within chapter 40A, section 6,\textsuperscript{152} and ensure judicial defer-
ence to municipal land-use decisions consistent with the adopted
plan and subsequent regulations.\textsuperscript{153}

\textbf{C. Penalties for Noncompliance with the Plan}

Consistent with California’s planning legislation, cities and towns
that fail to adopt or revise a comprehensive plan consistent with the
zoning regulations, neighborhoods, and the real property values of homeowners who pur-
chase property with the belief that the zoning ordinances adopted by their legislature are
intended to protect, not defeat, their investment backed expectations. \textit{See generally} Cecily T.
Talbert & Nadia L. Costa, \textit{Inclusionary Housing Programs: Local Governments Respond to Cali-
ifornia’s Housing Crisis}, 30 B.C. Envtl. Aff. L. Rev. 567 (2003) (discussing the conflict be-
tween affordable housing and environmental protection).

\textsuperscript{150} \textit{See} Shelley Ross Saxer, \textit{Planning Gain, Extractions, and Impact Fees: A Comparative Study
cussing strategies in England, Wales, and the United States to force land developers to
“internalize the externalities” of development impacts).

\textsuperscript{151} \textit{See} Curtin & Witten, \textit{ supra} note 15 at 333. \textit{See generally} Cal. Gov’t Code
§ 65,860(a)(2) (West 1997 & Supp. 2008) (requiring that land uses authorized by zoning be “compatible” with the objectives of the comprehensive plan); Haines v. City of Phoenix,
727 P.2d 339 (Ariz. 1986) (interpreting a state statute and holding that municipal zoning
regulations must be consistent—in harmony—with adopted comprehensive plans); Fasno
v. Bd. of County Comm’rs, 507 P.2d 23 (Or. 1973) (holding that all zoning changes must
be consistent with the comprehensive plan).

\textsuperscript{152} \textit{See} Mass. Gen. Laws ch. 40A, § 6 (2006). Efforts to revise the zoning act have been
underway for years without success. The drafters have been unwilling to integrate the zoning
act and the comprehensive permit statute as one. Rather, the drafters have chosen to
propose revisions to the zoning act solely, leaving the comprehensive permit statute un-
touched. What good is a reformed zoning act when a developer has at its disposal a blank
check in the form of a comprehensive permit? When would a developer ever file for ap-
proval pursuant to zoning? Add to the feeding trough set by the current comprehensive
permit statute the right to build commercial uses within the \textit{project}—as proposed by
DHCD. \textit{See} 760 Mass. Code Regs. 56.02 (2008). One wonders whether the legislature
should simply abolish the zoning act in toto. If chapter 40B is not repealed, the zoning act
will be simply surplusage and courses in Massachusetts land use law can be shortened from
a full semester to one day.

\textsuperscript{153} \textit{See} A Local & Reg’l Monitor v. City of L.A., 20 Cal. Rptr. 2d 228, 239 (Cal. Dist. Ct.
App. 1993) (holding that where a land-use regulation is consistent with a municipally
adopted comprehensive plan, the regulation can be reversed by a reviewing court only if it
is based on evidence from which no reasonable person could have reached the same con-
clusion); \textit{see also} Curtin & Witten, \textit{ supra} note 15, at 392–33.
mandatory planning requirements run the risk of their zoning ordinances and bylaws being declared void ab initio.\textsuperscript{154}

**Conclusion**

State attempts to impose land-use decisions on local government are the antithesis of the well-accepted principle of home rule. While there is little question that states have the authority and responsibility to impose their preemptory authority on occasion, ill-advised imposition of such authority has measurable drawbacks.

As discussed in this Article, the Massachusetts Anti-Snob Zoning Act provides a good, if not sad, example of a statute that has simply gone too far in asserting compliance with a state mandate through a hopelessly flawed and corrupt process. The repercussions of this ill-advised, regressive, and illogical statute are far reaching, as the very policy issue the statute portends to address has become the victim of its goals. Affordable housing will not be constructed in Massachusetts in any meaningful way while this transparent mockery of due process remains law.

Only the driver of the statutory bus, the Massachusetts DHCD, and its agents\textsuperscript{155} profiting from the anarchy that defines the statute, appear to be continuing to ignore what havoc the statute has wrought upon cities and towns and the production of affordable housing. Unwilling to engage in any form of self-reflection, unable to admit failure, and most regrettably, incapable of observing the successes in other states in the production of affordable housing, the Commonwealth holds onto a statute now thirty-eight years old and written by

\textsuperscript{154} See Res. Def. Fund v. County of Santa Cruz, 184 Cal. Rptr. 371, 374 (Cal. Ct. App. 1982) (“Since consistency with the general plan is required, absence of a valid general plan, or valid relevant elements or components thereof, precludes any enactment of zoning ordinances and the like.”).

\textsuperscript{155} In a remarkable attempt to portray 40B developers as victims of abutters seeking to protect themselves against the unregulated ravages of comprehensive permit projects, the CHAPA published a recent report relying on a “proprietary database” discussing the efforts of “[a] small number of attorneys [that] have represented a significant fraction of the abutters and municipal entities who have appealed local and [Housing Appeals Committee] zoning approvals.” *Citizens’ Hous. & Planning Assoc., Zoning Litigation and Affordable Housing Production in Massachusetts* 1, 3 (2008), available at http://www.chapa.org/pdf/CHAPAZoningAppealsandAffordableHousingReportFinal.pdf. CHAPA’s report suggests that the delay in construction of several of the eighty-four projects identified in the report’s sample is the result of abutter challenges, as opposed to, for example, the collapse of the housing market, investigations by the Inspector General, unsupported land purchase prices, or the impact legal fees charged by the developers’ counsel have on developer profits. See id. at 2.
urban legislators as payback to Boston’s suburbs for supporting school integration in the 1960s.

As with most bad laws, the Anti-Snob Zoning Act will soon be remembered as a sad chapter in Massachusetts’s byzantine and sometime corrupted politics. An enlightened legislature should replace the statute with the tools and techniques so successfully used elsewhere—mandatory comprehensive planning coupled with progressive regulatory and creative nonregulatory tools.

Rather than cities and towns fighting developers and their plans for development, development consistent with articulated and adopted plans will be welcome. Rather than developers destroying articulated and adopted plans with ill-advised developments of unlimited density—and lining their pockets at the expense of municipal residents—developers will become part of the solution, not just another obstacle in the production of affordable housing.

156 “A significant four-year study of organized crime in Massachusetts was undertaken by a special crime commission authorized by the legislature and concluded in 1957. The 1957 report categorized conditions as the existence in society of a widespread state of lawlessness” Dwight S. Strong, New England: The Refined Yankee in Organized Crime, 347 ANNALS AM. ACAD. POL. & SOC. SCI. 40, 46 (1963) (citing COMMONWEALTH OF MASS., REPORT OF THE SPECIAL COMMISSION REVIVED AND CONTINUED FOR THE PURPOSE OF INVESTIGATING ORGANIZED CRIME AND OTHER RELATED MATTERS, S. 799, at 114 (1957)). “Some public officials and business concerns devise unscrupulous ways to seek personal gain. There is a lack of public morality. Corruption grows.” Id. at 50.
FAST FOOD, ZONING, AND THE DORMANT COMMERCE CLAUSE: WAS IT SOMETHING I ATE?

JACKSON S. DAVIS*

Abstract: The obesity rate has risen to epidemic proportions in the United States. Fast food restaurants have recently come under scrutiny for their contribution to the growth of America’s waistlines. Communities across the country, recognizing obesity as a serious public health concern, are looking for innovative ways to halt the increasing rate of obesity. One such method is the use of zoning to exclude fast food restaurants entirely, as a matter of public health. Zoning regulations of this type, however, may confront challenges under the dormant commerce clause, which restricts the power of states to burden interstate commerce.

Introduction

Fast food has been a staple of the American diet for decades. The abundance of fast food restaurants, though, likely contributes to the steadily increasing obesity rate. In response, communities are beginning to look to zoning regulations as a means to curb the influence of restaurants serving fattening, high-caloric food at great speed and low prices. Zoning regulations aimed at fast food may also encourage the development of healthier alternatives to fast food by altering the built environment.

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1 See Eric Schlosser, Fast Food Nation: The Dark Side of the All-American Meal 6 (2004). Fast food, namely hamburgers and french fries, rose to prominence during the 1950s and has become an image of the “quintessential American meal.” Id. According to Schlosser, a “typical American now consumes approximately three hamburgers and four orders of french fries every week.” Id.

2 See id. at 240–41.

3 See Julie Samia Mair et al., The Ctr. for Law & the Public’s Health, The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy to Combat Obesity 40–53 (2005), available at http://www.publichealthlaw.net/Zoning%20Fast%20Food%20Outlets.pdf. The Center for Law and the Public’s Health report provides an in-depth look at the variety of ways in which communities have used zoning regulations to restrict the operation of fast food restaurants. See id.

4 See id. at 20; James O. Hill et al., Modifying the Environment to Reverse Obesity, Envtl. Health Perspectives, http://www.ehponline.org/docs/2005/7812/7812.pdf (last visited...
Local governments enact zoning regulations under the police power. The police power is the ability of state and local governments to regulate for the health, safety, and welfare of a community. The police power was inherited by the states from the English Crown, and states have delegated it to local governments—through zoning enabling laws—to enact zoning ordinances.

Because zoning laws are local in character, zoning ordinances that limit national fast food chains from participating in local markets may trigger scrutiny under the dormant Commerce Clause. The dormant Commerce Clause prohibits state and local governments from placing a burden upon interstate commerce. Under the dormant Commerce Clause, state and municipal laws will be struck down if they are facially discriminatory, discriminatory in purpose, or have a discriminatory effect. This Note will address whether a zoning ordinance that excludes fast food restaurants from a community, when adopted to reduce obesity rates, would withstand scrutiny under police power and dormant Commerce Clause analyses.

Part I will address the obesity epidemic in the United States, its relationship to fast food, and how communities are responding to this growing health crisis. Part II will describe the broad scope of the police power to regulate for the health, safety, morals, and welfare, as well as its relationship to zoning. Part III will cover the evolution of the dormant Commerce Clause doctrine and recent cases concerning commerce and zoning. Part IV will argue that a fast food zoning ordinance would be upheld under both the police power and dormant Commerce Clause analyses.

Mar. 27, 2008). The built environment refers to the ways in which a community designs and constructs its buildings and public spaces. Id.

8 Singer, supra note 5, § 11.1.1.1.
I. Fast Food and Obesity

Obesity has risen to epidemic levels throughout the world.\textsuperscript{12} Recent studies have found that 17.1\% of American children and adolescents are overweight, while nearly a third of the adult population, 32.2\%, is obese.\textsuperscript{13} National data have shown that while overall caloric consumption has increased, there has been no corresponding increase in physical activity among adults.\textsuperscript{14} Obesity greatly increases the risk of developing many serious medical conditions, including type 2 diabetes, atherosclerosis, hypertension, osteoarthritis, metabolic syndrome, sleep apnea, and certain forms of cancer.\textsuperscript{15} The obesity epidemic has turned on its head the traditional food-related problem that has plagued humanity throughout its history: starvation.\textsuperscript{16} The shift from concern for insufficient caloric consumption to extreme over consumption is a testament to the relative economic prosperity of the United States and developed nations vis-à-vis the developing world.\textsuperscript{17}

“Fast food”\textsuperscript{18} restaurants have become a focal point in the debate over obesity.\textsuperscript{19} Food at these establishments is generally very high in

\textsuperscript{12} World Health Organization, Obesity and Overweight (2003), http://www.who.int/dietphysicalactivity/media/en/gfs_obesity.pdf. The term “obesity” refers to a body mass index of 30 or higher for an adult, while “overweight” refers to a body mass index of between 25 and 29.9. Centers for Disease Control and Prevention, Overweight and Obesity: Defining Obesity and Overweight, http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm (last visited Mar. 27, 2008). Body mass index is determined by a person’s height and weight, and generally corresponds to the person’s total amount of body fat. \textit{Id.}


\textsuperscript{14} \textit{Id.}


\textsuperscript{17} \textit{See id.}

\textsuperscript{18} Fast food may be defined generally as food that “is designed for ready availability, use, or consumption and with little consideration given to quality or significance.” \textit{Merriam-Webster’s Collegiate Dictionary} 422 (10th ed. 2001).

\textsuperscript{19} \textit{See Yum! Brands, supra note 15, at 61. See generally Schlosser, supra note 1 (discussing the impact of the fast food industry on American culture). The idea that fast food outlets, such as McDonald’s, Burger King, and Wendy’s, significantly contribute to American obesity has permeated throughout popular culture. \textit{Super Size Me} (Kathbur Pictures
energy density—the energy content per unit weight—and fat, while providing few nutritional benefits. Humans have a very limited ability to detect energy density, thereby making it difficult to reduce food intake when consuming foods with high energy density. The high energy density of fast food thus “challenges our appetite control systems with conditions for which they were never designed.” A typical meal at a fast food restaurant may account for over eighty percent of the recommended daily allowance for fat, and a single menu item may provide nearly half of a day’s total caloric requirements. Fast food restaurants serve larger portions of food than other restaurants, and even fast food portion sizes have drastically increased in the past half century.

The most significant public health concern presented by fast food chains may be their ubiquity. These establishments can be found on practically every major thoroughfare, in both rich and poor communities. Fast food restaurants have even begun to appear within large churches known as “megachurches.” At these ubiquitous fast food

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21 Prentice & Jebb, supra note 20, at 191.

22 Id. Given the high energy density of foods at many fast food restaurants, “[I]t is virtually impossible to select a combination of items that yield even a moderate energy density.” Id.

23 Mair et al., supra note 3, at 12. Figures are based on a 2000-calorie diet. Id. A recent study showed that “children and adolescents aged 4–19 who ate fast food consumed on average 187 kilocalories per day more than those who did not, which could theoretically account for an additional 6 pounds of weight gain per child per year.” Id.

24 See id. at 10–11. The increase in portion size is noteworthy considering that “people tend to eat more when served more.” Id. at 11.

25 See Schlosser, supra note 1, at 4–5. There has been a tremendous increase in the number of fast food restaurants in the past thirty years. Mair et al., supra note 3, at 15. In 1972, there were only 72,850 fast food restaurants in the country. Id. In recent years, however, that number has grown to over 280,000. Id.

26 See Schlosser, supra note 1, at 4–5.

27 See Dan Thanh Dang, The New Advertising Age: From Eggs to Body Parts, Every Blank Space Seems Fair Game as Marketers Strive to Break Through the Clutter, BALT. SUN, Aug. 2, 2006, at 1C, available at 2006 WLNR 13342406 (commenting that megachurches are often built
outlets, consumers can purchase tasty meals that are both cheaply priced and quickly served.\textsuperscript{28} Perhaps due to the abundance of restaurants, people are eating out more; forty percent of food was purchased away from home in 1995, and fast food comprised thirty-four percent of such purchases in 1997.\textsuperscript{29}

While a conclusive link between fast food consumption and the obesity rate has yet to be proven, there is a growing belief that environmental factors are contributing to the rise in obesity rates.\textsuperscript{30} The planning of communities to include an abundance of fast food restaurants may encourage people to be more sedentary.\textsuperscript{31} Urban design and land-use planning can significantly impact levels of physical activity and access to healthy food.\textsuperscript{32} Further, close correlation exists between the spread of American-style fast food restaurants and obesity rates around the globe.\textsuperscript{33} As journalist Eric Schlosser has noted, “it seems wherever America’s fast food chains go, waistlines start expanding.”\textsuperscript{34}

\begin{itemize}
\item with a McDonald’s or Starbucks inside); Sandra Pedicini, \textit{Oviedo Church’s Plan Unnerves Neighbors, Orlando Sentinel}, Nov. 3, 2005, at B1.
\item Hill et al., \textit{supra} note 4. Fast food restaurants offer meals that are high in fat and sugar, each a relatively low-cost commodity, which allows the restaurants to charge low prices while providing super-sized portions. \textit{Id.} These extremely large portions lead the consumer to believe that they are the beneficiaries of a good deal, which in turn may propel consumers to purchase even more fast food meals. \textit{See id.; see also MAIR ET AL., supra note 3, at 11 (noting that “offering larger portions for relatively less money has become a successful marketing strategy for fast food businesses”).}
\item S.A. French et al., \textit{Fast Food Restaurant Use Among Women in the Pound of Prevention Study: Dietary, Behavioral and Demographic Correlates}, 24 \textit{Int’l J. of Obesity} 1353, 1353 (2000); \textit{see MAIR ET AL., supra note 3, at 14 (describing the frequency at which at Americans consume meals away from home).}
\item MAIR ET AL., \textit{supra} note 3, at 9.
\item Hill et al., \textit{supra} note 4. Restaurants, as well as other businesses such as banks, dry cleaners, and pharmacies, commonly offer drive-throughs, reducing activity levels of their customers. \textit{Id.} By contrast, community plans that facilitate walking to businesses and encourage a reduced reliance on automobiles may help promote physical activity and lower rates of obesity. \textit{See id.}
\item See \textit{Schlosser, supra} note 1, at 242. For example, the obesity rate among adults and the number of fast food restaurants in Great Britain both roughly doubled during the same time period, between 1984 and 1993. \textit{Id.} Additionally, the British are the largest consumers of fast food in western Europe and have the highest rate of obesity. \textit{Id.}
\item \textit{Id.}
\end{itemize}
Communities around the country are enacting creative solutions to this growing public health crisis. Some have proposed enacting a “fat tax” on unhealthy foods, while the New York City Board of Health has adopted two regulations aimed at curbing the negative effects of fast food consumption. The Board first adopted a ban on a particularly unhealthy type of cooking fat, trans fats, often used by the fast food industry. The Board also approved a requirement for fast food outlets to “prominently display the caloric content of each menu item on menu boards or near cash registers.”

Other communities have used zoning regulations to exclude fast food restaurants from their communities. These exclusions can be roughly classified as aesthetic-based zoning ordinances, with some communities enacting total bans, while others have created density restrictions on the number of fast food outlets permitted within a community. Aesthetic zoning regulations ban drive-through restaurants, or fast food restaurants generally, in order to preserve the unique and aesthetic qualities of a community. The town of Concord, Massachusetts, for example, has expressly prohibited “[d]rive-in or fast food restaurants.” Concord justified excluding fast food restaurants as consistent with the stated purposes of its zoning bylaws: to lessen street congestion and maintain the “aesthetic qualities of the community.”

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38 Id.
39 Id.
40 See Mair et al., supra note 3, at 40–53. While not explicitly tying their zoning regulations to health concerns, these ordinances have the unintended effect of promoting public health. See id. at 40.
41 See id. at 40–53.
42 See id. at 40–49.

ANY establishment whose principal business is the sale of foods or beverages in a ready-to-consume state, for consumption within the building or off-premises, and whose principal method of operation includes: (1) sale of foods and beverages in paper, plastic or other disposable containers; or (2) service of food and beverages directly to a customer in a motor vehicle.

Id.
44 Id. § 1.2.
Calistoga, California, is a community that has restricted fast food restaurants through a zoning ban on “formula restaurants.” The ordinance defines a formula restaurant as having “[s]tandardized menus, ingredients, food preparation, uniforms,” as well as similar architecture, logos, business names, or decor of another restaurant located elsewhere. Calistoga’s City Council objected to formula food businesses on aesthetic grounds, charging that formula restaurants would adversely affect the uniqueness of their community. Calistoga’s unique character, according to the City Council, is vital to sustaining its tourism industry.

While Concord, Calistoga, and other similar communities, have regulated fast food outlets out of their communities completely to maintain aesthetics, other municipalities are permitting these types of businesses with limitations as to the total number and density of fast food restaurants. Westwood Village, a section of Los Angeles bordering the University of California at Los Angeles, has enacted an ordinance limiting streets to one fast food restaurant for every 400 feet of lot frontage. Arcata, California, on the other hand, has placed a strict quota restriction on fast food restaurants. In Arcata, no more than nine fast food outlets may exist within the community at any time.

Communities have generally predicated their exclusion of fast food restaurants on aesthetic grounds. A Bronx Councilman, Manuel Rivera, however, has recently proposed a similar zoning regulation restricting the number, or location, of fast food restaurants. Councilman Rivera’s proposal is unique in that his proposal would restrict fast

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47 Mair et al., supra note 3, at 43–44.
48 Id. at 44.
49 See id. at 48–51.
51 Mair et al., supra note 3, at 49.
52 Id.
53 See id. at 40–53.
54 Fernandez, supra note 35, § 1, at 37.
food restaurants in order to fight chronic obesity. Recent reports have demonstrated a high level of obesity among New Yorkers. Rivera hopes to expand the dietary options for those living in low-income communities surrounded by countless fast food outlets. Currently, no municipalities within the United States have enacted zoning regulations excluding fast food restaurants solely as a matter of public health. Councilman Rivera’s proposal is one of the first to suggest using zoning laws to directly combat obesity.

II. THE POLICE POWER TO REGULATE FOR HEALTH, SAFETY, MORALS, AND WELFARE

A. Origin and Scope of the Police Power

The police power is the basis for all land-use regulations in the United States. Broadly, the police power is the capacity of states to regulate for the promotion of public health, safety, morals, and welfare. The power of the state qua sovereign to regulate for the health, safety, morals, and welfare is deeply rooted in English common law. The origins of the police power derive from the nuisance concept that a “person may not use his or her property to the detriment of another.”

Sir William Blackstone likened the police power to domestic

A built environment that has options for purchasing nutritious foods is more conducive to maintaining a healthy weight than one in which the only easily accessible options are high calorie, high fat, fast food establishments. In low-income neighborhoods, fast food may be more available than fresh produce. . . . [N]eighborhoods with the poorest socioeconomic indicators had 2.5 times as many fast food outlets as those neighborhoods in the wealthiest category. While food consumption is a complex behavior, the built environment can make it more or less difficult to make healthy choices.


55 Id.
56 Id.
57 Id. Research has indicated that a lack of access to healthy foods may serve as a “significant barrier to healthy eating.” Mair et al., supra note 3, at 19. The built environment can greatly affect how people eat:

58 See Mair et al., supra note 3, at 52–53.
59 See id.; Fernandez, supra note 35, § 1, at 37.
60 Curtin, Jr. & Talbert, supra note 6, at 1.
62 Eagle, supra note 7, § 2-2 to -3; Patrick J. Rohan, ZONING AND LAND USE CONTROLS § 35.02 (2006).
63 Eagle, supra note 7, § 2-1.
maintenance of a family, whereby family members are bound to act in
good manners and propriety towards one another. The police powers, originally vested in the English crown, succeeded to
the states following the Revolutionary War.

The Framers of the Constitution clearly intended for the states to
retain the police powers. The police powers were among the powers
reserved to the states that had not been delegated to the federal gov-
ernment. Justice Marshall, in Brown v. Maryland, declared that the po-
lice power “unquestionably remains, and ought to remain, with the
States,” and held that the power to force removal of gunpowder fell
within the ambit of the police power.

The police power has been an elusive, difficult-to-define concept. The U.S. Supreme Court first began to elucidate the scope of the po-
lice power in the landmark cases Munn v. Illinois and Mugler v. Kansas.
In Munn, the Court considered the question of whether the Illinois legis-
lature could fix a maximum rate for grain storage within the state.
Upholding the regulation, the Court identified broad power for states
to regulate private property under the police power. The Munn Court
found that Illinois’s statute was a valid assertion of its police power to
regulate property that affected the public interest. Chief Justice Waite
held that when the use of private property affects public interests there
is an implicit grant to the public of an interest in such use. Waite de-
defined public interests in property as when private property is “used in a
manner to make it of public consequence, and affect[s] the community

64 See William Blackstone, 4 Commentaries *162.
65 See Eagle, supra note 7, § 2-3.
67 Rohan, supra note 62, § 35.02(2); Susan M. Stedfast, Regulatory Takings: A Historical Overview and Legal Analysis for Natural Resource Management, 29 Envtl. L. 881, 886 (1999); see U.S. Const. amend. X.
68 Brown v. Maryland, 25 U.S. (12 Wheat.) 419, 443 (1827). The Brown decision was also the first time the Supreme Court used the term “police power.” Eagle, supra note 7, § 2-3; see Brown, 25 U.S. (12 Wheat.) at 443.
69 Markus Dirk Dubber, The Police Power: Patriarchy and the Foundations of American Government 120 (2005). “The police power’s defining characteristic [is] its very undefinability. Virtually every definition of the police power [is] accompanied by the remark that it cannot be, and has not been, defined.” Id.
70 Eagle, supra note 7, § 2-3; see Mugler v. Kansas, 123 U.S. 623 (1887); Munn v. Illinois, 94 U.S. 113 (1876).
71 94 U.S. at 123.
72 See id. at 124–26.
73 See id. at 126, 130; Stedfast, supra note 67, at 887–88.
74 Munn, 94 U.S. at 126.
at large.” He found that the states maintained the general police powers “necessary for the common good and the security of life and property.” These powers were derivative of all the powers possessed by the English Parliament. Under the police power, states may “regulate[] the conduct of its citizens one towards another, and the manner in which each shall use his own property, when such regulation becomes necessary for the public good.” In short, Munn recognized expansive powers of state governments to regulate the property interests of their citizens.

Mugler concerned the constitutionality of a Kansas prohibition law. The law, an 1880 amendment to the state constitution, prohibited the manufacture and sale of intoxicating liquors. The act stated that businesses selling or manufacturing intoxicating liquors were to be considered common nuisances. The Court ultimately upheld the constitutionality of the law. In its decision, the Court addressed the scope and limits of the police power. The Mugler Court defined the police power as the power to determine whether measures are necessary or appropriate to protect the public’s morals, health, or safety. The Court found that Kansas could exercise the police power to prohibit the sale or manufacture of alcohol since the regulation had the appropriate motivation of protecting the community from the evils of excessive alcohol consumption. The Court effectively deferred to Kansas’s decision to protect the community through such an act.

Mugler also carved out instances in which states may not legitimately exercise police powers, even though there is a strong presumption of validity for statutes enacted to promote public health, safety, and morals. Justice Harlan, writing for the Court, stated that when statutes ostensibly adopted to promote legitimate ends of the police power have “no real or substantial relation to those objects, or is a palpable invasion

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75 Id.
76 Id. at 124.
77 Id.
78 Id. at 125.
79 See id. at 124–26.
81 Id. at 654–55.
82 Id. at 656.
83 See id. at 661–62.
84 See id. at 660–61.
85 Id. at 661.
86 Mugler, 123 U.S. at 661–62.
87 See id.; Stedfast, supra note 67, at 889.
88 See 123 U.S. at 661.
of rights secured by the fundamental law,” courts have a duty to strike
down these laws as being incompatible with the Constitution.89

Since the Munn and Mugler decisions, the Court has consistently
taken an expansive view of the police power.90 Courts in general have
been very deferential to state and local governmental application of the
police power.91 In Hadacheck v. Sebastian, petitioner was convicted of
violating a City of Los Angeles ordinance prohibiting anyone from op-
erating a brickyard within the city limits.92 The Court rejected peti-
tioner’s takings and equal protection claims.93 The Court’s opinion,
delivered by Justice McKenna, demonstrates how deferential the judici-
ary was willing to be with respect to local regulations under the police
power.94 McKenna described the police power as “one of the most es-
sential powers of government . . . one that is the least limitable.”95 Ac-
cordingly, the Hadacheck Court found that police powers were limited
only by arbitrary, or unjustly discriminatory, application by state or local
government.96

Berman v. Parker interpreted the police power expansively to pro-
mote public welfare.97 Berman concerned the constitutionality of the
District of Columbia Redevelopment Act of 1945.98 The Act authorized
the District of Columbia to acquire property in “blighted areas”
through the power of eminent domain.99 The Act described the
blighted areas as “injurious to the public health, safety, morals, and wel-
fare.”100 In order to eliminate the injurious conditions, the Act sought
to lease or sell the acquired property for redevelopment purposes.101
Appellants—whose property was a commercial building, not the sort of
slum housing targeted by the Act—contended that the statute
amounted to an unconstitutional taking of their property.102 Appellants

89 Id.; see Laurence H. Tribe, American Constitutional Law § 8-1 (2d ed. 1988)
(discussing the intersection of the police power and substantive due process concerns at
the end of the nineteenth century).
90 See, e.g., Vill. of Belle Terre v. Boraas, 416 U.S. 1, 9 (1974); Berman v. Parker, 348
91 See Berman, 348 U.S. at 32; Hadacheck, 239 U.S. at 410.
92 239 U.S. at 404–05.
93 See id. at 413–14.
94 See id. at 410.
95 Id.
96 See id. at 411.
97 Eagle, supra note 7, § 2-4; see 348 U.S. at 33.
98 348 U.S. at 28.
99 Id. at 28–29.
100 Id. at 28.
101 Id. at 29.
102 See id. at 31.
argued that their property was being taken for aesthetic and consistency purposes: “[T]o develop a better balanced, more attractive community.”

The Court disagreed with appellants, ruling that the Act fell within the ambit of the police power. The Court adopted a particularly broad police power definition, holding that the traditional uses of the police power—“[p]ublic safety, public health, morality, peace and quiet, law and order”—are only illustrative of the wide scope of the police power. The Court noted that the public welfare was a “broad and inclusive” ideal that incorporated a diverse range of concepts, including spiritual, physical, aesthetic, and monetary values. The Court likened a blighted housing area’s effects on the community to the ways in which sewage could despoil a river.

In addition to the Court’s expansive view of the police power, Berman demonstrated the Court’s great degree of deference to legislatures regulating under the police power. The Court declared that it is up to the legislatures’ discretion, not the courts’, to decide upon the means to be employed when pursuing a legitimate end under the police power. As Justice Douglas explained:

The definition [of the police power] is essentially the product of legislative determinations addressed to the purposes of government, purposes neither abstractly nor historically capable of complete definition. Subject to specific constitutional limitations, when the legislature has spoken, the public interest has been declared in terms well-nigh conclusive. In such cases the legislature, not the judiciary, is the main guardian of the public needs to be served by social legislation . . . .

103 Id.
104 Berman, 348 U.S. at 32–33.
105 Id. at 32.
106 Id. at 33.
107 Id.
108 Id. at 32; see Nancy Kubasek & Garrett Coyle, A Step Backward Is Not Necessarily a Step in the Wrong Direction, 30 Vt. L. Rev. 43, 51 (2005).
109 Berman, 348 U.S. at 32; Kubasek & Coyle, supra note 108, at 51. Under police power analysis, the impact upon property owners is a secondary concern “and only then to gauge whether the impact exceeds some undefined cut-off for excessive diminution in value of the underlying property interest.” Lynda J. Oswald, Property Rights Legislation and the Police Power, 37 Am. Bus. L.J. 527, 549 (2000).
110 Berman, 348 U.S. at 32.
As a result of the *Berman* decision, once a legislature has identified a public welfare purpose under the police power, courts will play a very narrow role, heeding the judgment of the legislatures over their own.\(^{111}\)

**B. Relationship Between the Police Power and Zoning**

State governments regulate private property through land-use controls, often enacted at the municipal level.\(^{112}\) Municipalities “have no inherent police powers of their own and therefore no inherent power to zone.”\(^{113}\) Typically, states will delegate to municipalities—through zoning enabling acts—the power to regulate the types of uses and levels of usage that are permissible in districts within the municipality.\(^{114}\) These zoning enabling acts are predicated upon the power to regulate for health, safety, and welfare under the police powers.\(^{115}\) Zoning regulations were first enacted “because the common law of nuisance was not adequate to deal with modern problems of urbanization and industrialization.”\(^{116}\) Zoning is seen as a comprehensive method to defend against noxious uses of property.\(^{117}\)

Zoning laws were first declared constitutional in *Village of Euclid v. Ambler Realty*.\(^{118}\) *Euclid* serves as “the basis for modern zoning law.”\(^{119}\) At issue in *Euclid* was a 1922 ordinance establishing a comprehensive zoning plan in the village of Euclid, Ohio.\(^{120}\) A property owner harmed by the ordinance brought suit under the Fourteenth Amendment.\(^{121}\) The property owner had purchased a tract of land, valued at $10,000, to be used for industrial purposes.\(^{122}\) At the time of the litigation, the tract was a vacant lot waiting to be developed.\(^{123}\) The zoning ordinance lim-


\(^{112}\) SINGER, supra note 5, § 11.1.1.1.

\(^{113}\) ROHAN, supra note 62, § 35.01.

\(^{114}\) Id. § 35.03; SINGER, supra note 5, § 11.1.1.1.

\(^{115}\) SINGER, supra note 5, § 11.1.1.1.

\(^{116}\) George Skouras, Takings Law and the Supreme Court: Judicial Oversight of the Regulatory State’s Acquisition, Use, and Control of Private Property 34 (1998).


\(^{118}\) Skouras, supra note 116, at 35; see Vill. of Euclid v. Ambler Realty, 272 U.S. 365, 394–95 (1926).

\(^{119}\) Skouras, supra note 116, at 35.

\(^{120}\) 272 U.S. at 379–80.

\(^{121}\) Id. at 384.

\(^{122}\) Id.

\(^{123}\) Id.
ited this particular tract to residential uses, thereby significantly reducing its market value.\textsuperscript{124}

The Court upheld the Village’s zoning ordinance.\textsuperscript{125} Justice Sutherland’s opinion employed the language of nuisance law in determining whether zoning laws are a legitimate exercise of the police power.\textsuperscript{126} Justice Sutherland wrote that, much like nuisance, the question of whether the police power allows a prohibition on certain uses of property via zoning must be determined “in connection with the circumstances and the locality.”\textsuperscript{127} Sutherland found that the Latin maxim common in nuisance law, “sic utere tuo ut alienum non laedas,” may be instructive when determining the application of the police power.\textsuperscript{128}

He went on to note the considerable communal benefits of zoning industrial uses out of the area.\textsuperscript{129} These benefits included increased home safety, reduced traffic, reduced noise levels, and a reduced number of street accidents.\textsuperscript{130} The Court, thus, upheld the constitutionality of the zoning ordinance.\textsuperscript{131} Justice Sutherland concluded that the ordinance could not be considered “arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare.”\textsuperscript{132} In the eighty years that have passed since the \textit{Euclid} decision, courts have consistently found that municipalities may constitutionally use their police power to enact zoning regulations.\textsuperscript{133}

While there is a presumption of validity for zoning ordinances,\textsuperscript{134} the courts have sometimes struck down zoning ordinances found to place excessively burdensome restrictions on property.\textsuperscript{135} In \textit{Nectow v. City of Cambridge}, a landowner challenged a City of Cambridge zoning ordinance which would have divided his property into two different zones.\textsuperscript{136} As a result, a 100-foot strip would have been zoned residen-

\textsuperscript{124} See \textit{id.}.
\textsuperscript{125} \textit{Id.} at 394–95.
\textsuperscript{126} See \textit{Vill. of Euclid}, 272 U.S. at 387–88.
\textsuperscript{127} \textit{Id.} at 388.
\textsuperscript{128} \textit{Id.} at 387. Translated, the maxim holds that you should “use your own property as not to injure that of another.” \textit{Ballentine’s Law Dictionary} 1178 (3d ed. 1969).
\textsuperscript{129} \textit{Vill. of Euclid}, 272 U.S. at 394.
\textsuperscript{130} \textit{Id.}
\textsuperscript{131} See \textit{id.} at 395.
\textsuperscript{132} \textit{Id.} at 395.
\textsuperscript{133} See \textit{Rohan}, supra note 62, § 35.02(3); \textit{see also} \textit{Vill. of Belle Terre v. Boraas}, 416 U.S. 1, 9 (1974) (holding that “[t]he police power is not confined to elimination of filth, stench, and unhealthy places. It is ample to lay out zones where family values, youth values, and the blessings of quiet seclusion and clean air make the area a sanctuary for people”).
\textsuperscript{134} \textit{Rohan}, supra note 62, § 35.04(1)(d).
\textsuperscript{136} \textit{Id.} at 185, 186.
tial.\textsuperscript{137} The Court struck down the ordinance because there could be no practical use for this 100-foot strip, and so the health, safety, and welfare would not be promoted through such an ordinance.\textsuperscript{138}

III. THE DORMANT COMMERCE CLAUSE AND THE POLICE POWER

The dormant Commerce Clause holds “that state and local laws are unconstitutional if they place an undue burden on interstate commerce.”\textsuperscript{139} Article 1, Section 8 of the U.S. Constitution grants Congress the power to regulate interstate commerce.\textsuperscript{140} The Constitution itself is silent on the issue of whether states can interfere with interstate commerce, though it does prohibit states from interfering with foreign commerce.\textsuperscript{141} The courts have interpreted the Commerce Clause to have a dormant aspect that limits the ability of states to regulate economic activities in which “Congress has not affirmatively acted to either authorize or forbid the challenged state activity.”\textsuperscript{142} The purpose behind the dormant Commerce Clause was to eliminate the economically protectionist state actions that were common prior to the adoption of the Constitution.\textsuperscript{143} As described by Justice Jackson:

Our system, fostered by the Commerce Clause, is that every farmer and every craftsman shall be encouraged to produce by the certainty that he will have free access to every market in the Nation, that no home embargoes will withhold his export, and no foreign state will by customs duties or regula-

\begin{itemize}
  \item \textsuperscript{137} \textit{Id.}
  \item \textsuperscript{138} \textit{Id.} at 187–88.
  \item \textsuperscript{139} Chemerinsky, \textit{supra} note 10, § 5.3.1.
  \item \textsuperscript{140} U.S. Const. art. I, § 8. (“The Congress shall have Power . . . [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes . . .”).
  \item \textsuperscript{141} Tribe, \textit{supra} note 89, § 6-2.
  \item \textsuperscript{142} Atl. Coast Demolition & Recycling, Inc. v. Bd. of Chosen Freeholders, 48 F.3d 701, 710 (3d Cir. 1995) (quoting Norfolk S. Corp. v. Oberly, 822 F.2d 388, 392 (3d Cir. 1987)). According to Professor Tribe, the courts should be attentive to protectionist state legislation because “the proper structural role of state lawmakers is to protect and promote the interests of their own constituents. That role is one that they will inevitably try to fulfill even at the expense of citizens of other states.” Tribe, \textit{supra} note 89, § 6-5. The traditional check on legislative power, the ballot box, is unavailable to out-of-state citizens harmed by protectionist state legislation, and thus, it is up to the courts to step in to counter legislative abuses of state power. \textit{See id.}
  \item \textsuperscript{143} Brannon P. Denning & Rachel M. Lary, \textit{Retail Store Size-Capping Ordinances and the Dormant Commerce Clause}, 37 Urb. Law. 907, 916 (2005); Michael E. Smith, \textit{State Discriminations Against Interstate Commerce}, 74 Cal. L. Rev. 1203, 1207 (1986); \textit{see Coenen, supra} note 11, at 209–10.
\end{itemize}
tions exclude them. Likewise, every consumer may look to the free competition from every producing area in the Nation to protect him from exploitation by any. Such was the vision of the Founders; such has been the doctrine of this Court which has given it reality.\textsuperscript{144}

The concept of the dormant Commerce Clause was first introduced in \textit{Gibbons v. Ogden}.\textsuperscript{145} At issue in \textit{Gibbons} was whether New York could grant a steamboat operator the right of exclusive navigation of the waters within the state.\textsuperscript{146} Chief Justice Marshall first described commerce as including not merely the exchange of commodities, but “commercial intercourse between nations, and parts of nations.”\textsuperscript{147} Marshall found that steamboat navigation fell within the definition of commerce.\textsuperscript{148} He concluded that the Commerce Clause was a limit on the power of the states.\textsuperscript{149} The Court held that “when a State proceeds to regulate commerce with foreign nations, or among the several States, it is exercising the very power that is granted to Congress, and is doing the very thing which Congress is authorized to do.”\textsuperscript{150} Chief Justice Marshall, thus, established interstate commerce as a realm in which Congress had supreme authority and that the states could not encroach upon.\textsuperscript{151} He did, however, leave open the door for the limited intersection of state and federal powers over commerce when states are exercising their police power function, namely for “[i]nspection laws, quarantine laws, [or] health laws of every description.”\textsuperscript{152}

Since the ruling in \textit{Gibbons}, the Court has had great difficulty deciding the difficult question of whether a state law is unduly burdening interstate commerce or is a valid use of the police power.\textsuperscript{153} The Supreme Court has utilized several different schema for addressing the fine line between the police power and the dormant Commerce Clause.\textsuperscript{154} The first approach, devised in \textit{Cooley v. Board of Wardens}, attempted to determine whether a particular subject area being regu-

\textsuperscript{144} H.P. Hood & Sons, Inc. v. Du Mond, 336 U.S. 525, 539 (1949).

\textsuperscript{145} \textit{Chemerinsky, supra} note 10, § 5.3.3.1; \textit{see} \textit{Gibbons v. Ogden}, 22 U.S. (9 Wheat.) 1, 199–200 (1824).

\textsuperscript{146} 22 U.S. (9 Wheat.) at 1–2.

\textsuperscript{147} \textit{Id.} at 189–90.

\textsuperscript{148} \textit{Id.} at 190.

\textsuperscript{149} \textit{See id.} at 199–200.

\textsuperscript{150} \textit{Id.}

\textsuperscript{151} \textit{See id.}

\textsuperscript{152} \textit{Gibbons}, 22 U.S. (9 Wheat.) at 203; \textit{see} \textit{Chemerinsky, supra} note 10, § 5.3.3.1.

\textsuperscript{153} \textit{Chemerinsky, supra} note 10, § 5.3.3.1.

\textsuperscript{154} \textit{See id.} § 5.3.3.1–2.
lated by a state required a uniform, national approach or necessitated a local level of legislation. The analytical framework of Cooley proved to be a problematic solution that raised a number of new questions. For example, under the Cooley approach, protectionist state legislation that greatly affected interstate commerce was allowable if it was considered a local action. Additionally, the Cooley decision failed to address the distinction between national and local legislation.

In Di Santo v. Pennsylvania, the Court adopted a new approach for dormant Commerce Clause cases. Justice Butler’s opinion held that a state law that “directly interferes with or burdens foreign commerce is a prohibited regulation and invalid, regardless of the purpose with which it was passed.” By implication, state statutes that had only an indirect effect on interstate commerce were deemed valid under Di Santo. The Di Santo test was difficult to apply in practice. It was often unclear whether a state law was directly or indirectly affecting commerce through its regulations.

The modern dormant Commerce Clause approach has abandoned the rigid, bright-line tests of Cooley and Di Santo in favor of a more flexible approach: “State regulation affecting interstate commerce will be upheld if (a) the regulation is rationally related to a legitimate state end, and (b) the regulatory burden imposed on interstate commerce, and any discrimination against it, are outweighed by the state interest in enforcing the regulation.” In this dual-part analytical framework, the initial question is whether the legislation is rationally related to a legitimate state end. At the heart of the modern approach, however, is the next question: whether the state or local legislation is facially discriminatory. That is, the question is “whether a state law discriminates against out-of-staters or whether it treats all alike

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155 See Cooley v. Bd. of Wardens, 53 U.S. (12 How.) 299, 319 (1851); Chemerinsky, supra note 10, § 5.3.3.1.
156 See 53 U.S. (12 How.) at 319; Chemerinsky, supra note 10, § 5.3.3.1.
157 Chemerinsky, supra note 10, § 5.3.3.1; see 53 U.S. (12 How.) at 319.
158 Chemerinsky, supra note 10, § 5.3.3.1; see 53 U.S. (12 How.) at 319.
160 Id.
161 See id.
162 See id.; Chemerinsky, supra note 10, § 5.3.3.1.
163 Chemerinsky, supra note 10, § 5.3.3.1.
165 Tribe, supra note 89, § 6-5.
166 See Coenen, supra note 11, at 220.
regardless of residence.” Discriminatory laws are subject to a “virtually per se rule of invalidity.” The Court has declared that it will employ the “strictest scrutiny” in facially discriminatory cases. A discriminatory law “will be upheld only if it is proven that the law is necessary to achieve an important government purpose.” State laws may also violate the dormant Commerce Clause with statutes that are facially neutral with respect to out-of-staters, but have a discriminatory effect or a discriminatory purpose.

Even where a state law is not facially discriminatory, or discriminatory in effect or purpose, the courts have found that they can nonetheless run afoul of the dormant Commerce Clause. The courts have striven to shield the national economic market from nondiscriminatory state laws that place an undue burden on interstate commerce. In *Pike v. Bruce Church, Inc.*, the Court devised a balancing test to deal with the issue of nondiscriminatory state laws affecting commerce. The *Pike* Court found that “[w]here the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.” In other words, if the burdens a state law places on interstate commerce outweigh the benefits, the law will be struck down. This balancing test provides the courts with a great deal of discretion in their analysis of nondiscriminatory dormant Commerce Clause cases. Unlike facially discriminatory laws, nondiscriminatory laws are generally upheld by the courts.

The *Pike* balancing approach has led to a great deal of confusion over what constitutes a discriminatory effect under the dormant Com-

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167 Chemerinsky, *supra* note 10, § 5.3.3.2.
170 Chemerinsky, *supra* note 10, § 5.3.6.
172 Id. at 253.
173 Id.
175 397 U.S. at 142.
176 See id; Tribe, *supra* note 89, § 6.5.
177 Chemerinsky, *supra* note 10, § 5.3.5.
178 See id.
Two cases in particular, *Hunt v. Washington State Apple Advertising Commission* and *Minnesota v. Clover Leaf Creamery Co.*, best illustrate this confusion. In *Hunt*, North Carolina enacted a statute requiring all containers of apples shipped into or sold in the state to bear a U.S. Department of Agriculture grading system or no grade at all. The statute explicitly prohibited state grading systems. Washington State—the largest producer of apples in the United States—used its own extensive, industry-accepted grading system for apples and brought suit claiming that North Carolina’s statute was an unconstitutional burden on interstate commerce. The Court found that North Carolina’s facially neutral statute had a discriminatory effect on interstate commerce. The statute raised the costs for Washington producers doing business in North Carolina, stripped away Washington’s competitive advantage stemming from its rigorous grading system, and “insidiously operate[d] to the advantage of local apple producers.” The Court found that the ostensible benefits of the statute—consumer protection—far outweighed the burdens on commerce. The Court noted that any desire to protect consumers through apple grading was undermined by the terms of the statute because the statute permitted apples with no grade label whatsoever, depriving consumers of information about apple quality.

Though factually similar to *Hunt*, in *Clover Leaf* the Court upheld a Minnesota statute as having only incidental burdens on interstate commerce. *Clover Leaf* concerned a Minnesota statute banning the

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181 432 U.S. at 337.

182 Id.

183 Id. at 336, 339. North Carolina’s regulatory scheme would have caused a number of problems for Washington’s apple producers, requiring them to either abandon the North Carolina market or alter long-standing procedures. Id. at 338. Washington’s producers would have had to remove their labels—giving their product a damaged appearance—repack only those apples shipped to North Carolina, or discontinue entirely the use of their preprinted apple containers. Id. These options would have been costly and inefficient for Washington apple producers. Id.

184 Id. at 352–53.

185 Id. at 351–52.

186 Id. at 353.

187 *Hunt*, 432 U.S. at 353.

“retail sale of milk in plastic nonreturnable, nonrefillable containers,” while allowing the sale of nonreturnable, nonrefillable containers of a material other than plastic, such as paperboard.189 Upholding the statute, Justice Brennan first found that the act was not facially discriminatory in that it regulated all retailers without consideration of whether the milk containers were produced in-state or out-of-state.190 Applying the Pike balancing test, Justice Brennan concluded that the burdens imposed on interstate commerce were “relatively minor” compared to the environmental benefits created by the statute.191 Although Minnesota had a substantial pulpwood industry, which would benefit significantly from the statute, and no plastics industry, which would hurt only out-of-state firms, the Court nonetheless found that “[a] nondiscriminatory regulation serving substantial state purposes is not invalid simply because it causes some business to shift from a predominately out-of-state industry to a predominately in-state industry. Only if the burden on interstate commerce clearly outweighs the State’s legitimate purposes does such a regulation violate the Commerce Clause.”192

The results of Hunt and Clover Leaf are seemingly contradictory: each involves a facially neutral law, apparently adopted for a legitimate purpose, which had discriminatory effects on interstate commerce.193 However, in only one case, Hunt, was the law struck down.194 The different outcomes have been explained by noting that there was some evidence of a discriminatory intent by North Carolina in enact-

189 *Id.* at 458. The statute cited solid waste management concerns as the impetus for regulating milk containers. *Id.* at 458–59 & n.2.

190 *Id.* at 471–72.

191 *Id.* at 472, 473.

192 *Id.* at 474; see also Exxon Corp. v. Governor of Md., 437 U.S. 117, 126 (1978). In Exxon, a Maryland statute prohibited petroleum producers or refiners from operating service stations within the state. *Id.* at 119–20. The statute greatly affected citizens of other states, since all the gasoline sold in Maryland was produced in out-of-state refineries. See *id.* at 121. Nevertheless, the Court found that the statute did not violate the dormant Commerce Clause, holding that:

[T]he Act creates no barriers whatsoever against interstate independent dealers; it does not prohibit the flow of interstate goods, place added costs upon them, or distinguish between in-state and out-of-state companies in the retail market. The absence of any of these factors fully distinguishes this case from those in which a State has been found to have discriminated against interstate commerce.

*Id.* at 126.


194 See 432 U.S. at 352–53.
ing its statute, whereas Minnesota’s intentions were not deemed to be discriminatory.\textsuperscript{195} Constitutional scholar Erwin Chemerinsky has said that laws will likely be found to have a discriminatory effect if they exclude all out-of-staters from a certain market within the state, place costs on out-of-staters that are not borne by in-staters as well, or are motivated by economic protectionism.\textsuperscript{196}

The Supreme Court has yet to apply its dormant Commerce Clause analysis to zoning regulations.\textsuperscript{197} In recent years, a number of zoning decisions with dormant Commerce Clause implications have begun to appear in federal circuit and district courts.\textsuperscript{198} The courts have upheld these zoning regulations, finding that they do not impermissibly burden interstate commerce.\textsuperscript{199} In \textit{Georgia Manufactured Housing Ass’n v. Spalding County}, Spalding County amended its zoning ordinance to require that manufactured (mobile) homes have a certain roof pitch.\textsuperscript{200} The district court held that the roof pitch requirement caused problems for housing manufacturers, both in and out of Georgia, and increased costs for members of the housing industry.\textsuperscript{201} Reversing the district court’s decision, the U.S. Court of Appeals for the Eleventh Circuit held that the zoning regulation did not impermissibly burden interstate commerce because the costs imposed were the same for both in-state and out-of-state manufacturers.\textsuperscript{202}

In a similar case, \textit{Texas Manufacturing Housing Ass’n v. City of Nederland}, the City of Nederland denied a lot owner a permit to install a U.S. Department of Housing and Urban Development HUD-code manufactured home on his property, determining the manufactured

\textsuperscript{195} Baker & Konar-Steenberg, \textit{supra} note 9, at 7. Confusion exists as to whether \textit{Hunt} was even decided as a case about discriminatory effect, as \textit{Clover Leaf} seems to place it in the discriminatory purpose camp. \textit{Id}.

\textsuperscript{196} Chemerinsky, \textit{supra} note 10, § 5.3.4. Under Chemerinsky’s framework, the statute in \textit{Clover Leaf} was upheld because it did not prevent out-of-state companies from selling milk within Minnesota, though it did disadvantage out-of-state plastics companies. \textit{Id}.

\textsuperscript{197} See Baker & Konar-Steenberg, \textit{supra} note 9, at 3.

\textsuperscript{198} See Ga. Manufactured Hous. Ass’n v. Spalding County, 148 F.3d 1304, 1308 (11th Cir. 1998); Tex. Manufactured Hous. Ass’n v. City of Nederland, 101 F.3d 1095, 1104 (5th Cir. 1996); Wal-Mart Stores, Inc. v. City of Turlock, 483 F. Supp. 2d 987, 994 (E.D. Cal. 2006); Baker & Konar-Steenberg, \textit{supra} note 9, at 2–3 & n.1.


\textsuperscript{200} 148 F.3d at 1306.

\textsuperscript{201} \textit{Id} at 1308.

\textsuperscript{202} \textit{Id} (citing Exxon Corp. v. Governor of Md., 437 U.S. 117, 127–28 (1978)). The court also held that any resulting increase in price to the consumer due to the ordinance related to the regulation’s merits and not to its burden on interstate commerce. \textit{Id}.
home was a “trailer coach.” Nederland’s zoning ordinance prohibited trailer coaches on any lot except within trailer parks. Plaintiff contended that HUD-code manufactured housing was an out-of-state interest, as many are built outside Texas and imported into the state, that was impermissibly burdened by the zoning ordinance. The U.S. Court of Appeals for the Fifth Circuit, affirming the district court’s grant of summary judgment, found that the zoning ordinance burdened in-state and out-of-state interests equally and that plaintiff had not shown that in-state businesses will supply housing instead of HUD-code manufactured housing.

IV. Fast Food Zoning Ordinances Would Be Upheld Under Police Power and Dormant Commerce Clause Analyses

Fast food zoning ordinances would likely be a valid application of a local government’s police power. In addition, such ordinances would not have discriminatory effects under the Pike v. Bruce Church, Inc. balancing approach to the dormant Commerce Clause. The use of zoning ordinances to exclude fast food restaurants—with the promotion of public health as the sole justification—would be a permissible application of the police power by a municipality. Obesity rates in the United States have risen dramatically in the past half century. The obesity rate in the United States is, at present, higher than any other industrialized country. The obesity rate for U.S. adults has doubled since the early 1960s, while the childhood obesity rate has

203 101 F.3d at 1098.
204 Id.
205 Id. at 1102.
206 Id. at 1104. Recently, in Wal-Mart Stores v. City of Turlock, the discount retailer chain brought suit against the City of Turlock over a zoning regulation that prohibited certain types of large-scale “discount superstores,” alleging that the City was attempting to “protect local retailers from competition in violation of the Commerce Clause.” 483 F. Supp. 2d 987, 994 (E.D. Cal. 2006). The court granted the City’s motion for summary judgment, holding that such a zoning regulation was facially neutral, did not have a discriminatory effect, did not increase costs for out-of-state competitors, did not deny out-of-state businesses access to a local market, and satisfied the Pike balancing analysis. Id. at 1011–20.
209 See Vill. of Belle Terre, 416 U.S. at 9; Berman, 348 U.S. at 32–33; Hadacheck, 239 U.S. at 410.
210 See Schlosser, supra note 1, at 240.
211 Id.
also doubled since the late 1970s.\footnote{212}{Id.} In total, around forty-four million adults are obese, while six million are “super-obese.”\footnote{213}{Id. The super-obese weigh at least one hundred pounds more than what would be considered normal for their height and weight. Id.}

This level of obesity can lead to a variety of life-threatening medical conditions such as heart disease, hypertension, and diabetes.\footnote{214}{See Stanford Hospital & Clinics, supra note 15.} Obesity places a significant strain on the U.S. health care system.\footnote{215}{See Centers for Disease Control and Prevention, Overweight and Obesity: Economic Consequences, \url{http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm} (last visited Mar. 27, 2008).} Obesity has an impact on direct health care costs for preventive, diagnostic, and treatment services, as well as indirect costs relating to morbidity and mortality.\footnote{216}{Id.}

Recent research has suggested that the built environment may have a strong impact on obesity.\footnote{217}{Id.} Much of the American landscape provides a bounty of “inexpensive, high-energy, good-tasting food that is available continuously throughout the day.”\footnote{218}{Id. This landscape, when combined with increasingly sedentary lifestyles, has contributed to the gradual increase in obesity.\footnote{219}{One of the most important ways in which the growing tide of obesity can be stopped is to create built environments that promote healthier lifestyle choices.\footnote{220}{Alternatives to fast food within a community, such as supermarkets or grocery stores, tend to increase consumption of healthier foods, as they typically offer more nutritious food at lower prices than fast food restaurants.\footnote{221}{As stated in Berman v. Parker, the uses of the police power for}}}}

A zoning ordinance excluding fast food restaurants as a matter of public health would fall within the purview of a municipality’s police power.\footnote{222}{See Berman v. Parker, 348 U.S. 26, 32–33 (1954); Hadacheck v. Sebastian, 239 U.S. 394, 410 (1915); Mugler v. Kansas, 123 U.S. 623, 662 (1887). Prevention of obesity “requires changes in individual behavioral patterns as well as eliminating environmental barriers to healthy food choices and active lifestyles.” Marion Nestle & Michael F. Jacobson, Halting the Obesity Epidemic: A Public Health Policy Approach, in \textit{Law and the Health System}, supra note 32, at 207, 208. This Note will not address the difficult and important question of whether municipalities should interfere with individual behavioral patterns in enacting zoning ordinances of this sort. For discussion on this subject, compare Richard A.}}
the public welfare is a “broad and inclusive” concept. Moreover, the police power has long been explicitly tied to a notion of public health. Local governments have a clear public interest in reducing or eliminating restaurants that may be significant contributors to a life-threatening condition: obesity.

The Supreme Court has plainly stated its preference for deferring to the judgment of legislative bodies in police power cases. If a community were to enact a fast food zoning ordinance on public health grounds, a court would likely defer to the municipality’s discretion as to the means employed to reach the legitimate end of reducing public obesity. Thus, fast food zoning would likely be upheld as a valid exercise of the police power even if there are other available obesity-reducing options. The use of the police power, the “least limitable” of governmental powers, would only be struck down if it had no substantial relation to public health. A fast food zoning ordinance enacted to combat obesity, would almost certainly be upheld under the discretionary standard employed in police power cases.


348 U.S. at 33.

See id. at 32; Mugler, 123 U.S. at 661; Eagle, supra note 7, § 2-3.

See Berman, 348 U.S. at 32–33.

See id. at 32, 33; Hadacheck, 239 U.S. at 410; Mugler, 123 U.S. at 661.

See Berman, 348 U.S. at 32; Hadacheck, 239 U.S. at 410; Mugler, 123 U.S. at 661.

See Berman, 348 U.S. at 32; Hadacheck, 239 U.S. at 410; Mugler, 123 U.S. at 661. The Court has indicated that the viability of a less restrictive alternative may factor in a dormant Commerce Clause analysis for determining the extent of the burden placed on interstate commerce. See Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970). However, the Supreme Court has yet to strike down a nondiscriminatory law because the ends could have been achieved through a less restrictive alternative. Chemerinsky, supra note 10, § 5.3.5.

Hadacheck, 239 U.S. at 410.

See Mugler, 123 U.S. at 661.

See Berman, 348 U.S. at 32–33; Hadacheck, 239 U.S. at 410; Mugler, 123 U.S. at 661–62. Some have argued that “[t]he traditional justifications for the use of police power in the case of obesity are much weaker because the causal link between any given intervention and reducing obesity is questionable.” Edward P. Richards III, Is Obesity a Public Health Problem?, in Law and the Health System, supra note 32, at 219, 220. This argument, however, is unpersuasive, given the deference the courts have shown legislative action under the police power. See, e.g., Berman, 348 U.S. at 32; Hadacheck, 239 U.S. at 410; Mugler, 123 U.S. at 661. If a legislative determination were made linking obesity, the built environment, and zoning, a court would only strike down the ordinance if it was “arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare.” See Vill. of Euclid v. Ambler Realty Co., 272 U.S. 365, 395 (1926).
While fast food zoning would likely survive police power analysis, it may nonetheless face a challenge under the dormant Commerce Clause.\textsuperscript{232} The first step in any dormant Commerce Clause analysis is to determine whether the state action is rationally related to a legitimate state end.\textsuperscript{233} The Court has consistently held that legislation enacted by a state or municipality under the police power, such as a zoning ordinance, is rationally related to a legitimate state end.\textsuperscript{234} The next step, then, is to determine whether under the \textit{Pike} balancing test the burdens imposed on interstate commerce by a fast food zoning ordinance would outweigh its purported benefits.\textsuperscript{235}

As issues of local concern with potential national implications, zoning regulations are beginning to emerge as an important subject matter in dormant Commerce Clause jurisprudence.\textsuperscript{236} The Supreme Court will likely choose to address the issue of zoning and the dormant Commerce Clause as more communities begin to use zoning to achieve such goals as preserving local character or curbing the obesity epidemic.\textsuperscript{237} A fast food zoning ordinance would be a governmental action in response to a national obesity problem that was reflective of a community’s needs and values.\textsuperscript{238} A zoning regulation, by its very nature, affects commercial interests in that it can place conditions on which commercial uses are permissible on a particular parcel; thus, zoning regulations have the potential to raise barriers to interstate commerce, implicating the dormant Commerce Clause.\textsuperscript{239}

Fast food restaurants are typically either part of a national restaurant chain or a franchise of such a national chain.\textsuperscript{240} They are enormous enterprises in terms of both their sheer numbers and net prof-

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\textsuperscript{232} See Baker \& Konar-Steenberg, supra note 9, at 2–3. Due to the vast and complex area of dormant Commerce Clause jurisprudence, this Note will not purport to be a definitive treatment of zoning regulations under the dormant Commerce Clause. Rather, this analysis will focus on zoning in light of several \textit{Pike} balancing cases in the context of discriminatory effects upon interstate commerce.

\textsuperscript{233} Tribe, supra note 89, § 6-5.


\textsuperscript{235} See \textit{Pike} v. Bruce Church, Inc., 397 U.S. 137, 142 (1970); Tribe, supra note 89, § 6-5. For the purposes of this section, a fast food zoning ordinance is assumed not to be facially discriminatory.

\textsuperscript{236} See Baker \& Konar-Steenberg, supra note 9, at 2.

\textsuperscript{237} See id. at 2–3.

\textsuperscript{238} See id. at 39–40.

\textsuperscript{239} See id.

\textsuperscript{240} See Schlosser, supra note 1, at 94–98 (discussing the use of franchising in the fast food industry).
\end{flushright}
its. As commercial enterprises, they are participating in practically every local market in the country. A fast food zoning ordinance would effectively prevent major national commercial actors from participating in local markets, which would have an indirect effect on interstate commerce. A fast food zoning ordinance could be seen as promoting local restaurants at the expense of out-of-state fast food chains. Fast food chains could argue that municipalities are motivated by economic protectionism, with any benefits to public health as a subterfuge to avoid invalidity under the dormant Commerce Clause. Out-of-state restaurant chains may also contend that the burdens imposed on interstate commerce far outweigh the benefits to public health, arguing that the connection between obesity and the built environment are tenuous. The narrowly local concern of a fast food zoning ordinance—protecting a community’s health—would render it susceptible to a challenge under the dormant Commerce Clause.

Though a fast food zoning ordinance may be vulnerable under the dormant Commerce Clause, such an ordinance would likely survive under the *Pike* balancing test employed in *Hunt v. Washington State Apple Commission, Minnesota v. Clover Leaf Creamery Co.*, and other cases. Most significantly, zoning ordinances to improve public health by excluding fast food restaurants would not have a discriminatory intent. A fast food zoning ordinance’s primary aim would be to reduce unhealthy food options within a community and promote healthier lifestyles in the face of an obesity epidemic. Moreover, economic protectionism, one of the rationales behind the dormant Commerce Clause, would not be a motivating force behind a fast food zoning ordi-

241 *See id.* at 3–5.
242 *See id.* at 3.
243 *See Wickard v. Filburn, 317 U.S. 111, 127–29 (1942) (holding that Congress could regulate a farmer’s production of a trivial amount of wheat for personal consumption because the aggregate effect of such production could significantly affect interstate commerce); Baker & Konar-Steenberg, *supra* note 9, at 41.
244 *See Chemerinsky, supra* note 10, § 5.3.4.
245 *See id.*
246 *See Richards, supra* note 231, at 220.
247 *See Baker & Konar-Steenberg, supra* note 9, at 41.
249 *See Clover Leaf, 449 U.S. at 471–73; Exxon, 437 U.S. at 126; Hunt, 432 U.S. at 351–52; Chemerinsky, *supra* note 10, § 5.3.4.
250 *See Clover Leaf, 449 U.S. at 473.
All burdens placed on interstate commerce would be incidental to the overriding goal of changing the built environment to promote healthier lifestyles.\footnote{See id. at 471–73; Exxon, 437 U.S. at 126.}

For instance, suppose a hypothetical city, Clarksville, enacted a zoning ordinance that prohibited restaurants primarily serving ready-to-consume foods in paper, plastic, or other disposable containers for consumption on or off premises, as well as restaurants directly serving food to customers in motor vehicles.\footnote{See Clover Leaf, 449 U.S. at 473; Exxon, 437 U.S. at 126.} Clarksville’s legislature justified the use restriction as necessary to protect the health and welfare of its citizens through healthier dietary options.\footnote{See Concord, Mass., Zoning Bylaw § 4.7.1 (2006), available at http://www.concordnet.org/Pages/ConcordMA_BOA/zone/2006ZoningBylaw.pdf.} Clarksville’s hypothetical ordinance would not be driven by an intent to protect the local restaurant industry, though surely national fast food chains would be hampered in their ability to open new restaurants within that particular zone.\footnote{See Berman v. Parker, 348 U.S. 26, 32–33 (1954); Vill. of Euclid v. Ambler Realty Co., 272 U.S. 365, 394–95 (1926).} Further, such a fast food zoning ordinance would not impose costs on out-of-staters not borne by in-staters.\footnote{See Clover Leaf, 449 U.S. at 472–73.} Clarksville’s ordinance would affect locally owned fast food restaurants the same as out-of-state fast food restaurants in that both would be expressly prohibited within the zone.\footnote{Contra Hunt, 432 U.S. at 351–53.} The costs imposed on local purveyors—the prohibition of a certain type of restaurant—would be equal to those of out-of-state chains.\footnote{See Ga. Manufactured Hous. Ass’n v. Spalding County, 148 F.3d 1304, 1308 (11th Cir. 1998); Tex. Manufactured Hous. Ass’n v. City of Nederland, 101 F.3d 1095, 1104 (5th Cir. 1996).} In-state restaurants would be barred from operating in the \textit{fast food} mode—a harm proportional to that of any out-of-state enterprise.\footnote{See Ga. Manufactured Hous., 148 F.3d at 1308; Tex. Manufactured Hous., 101 F.3d at 1104.} Since fast food is a national enterprise, dominated by large corporations likely to be out-of-state, Clarksville’s ordinance logically would have a far greater impact on out-of-staters.\footnote{See Exxon Corp. v. Governor of Md., 437 U.S. 117, 126 (1978); Ga. Manufactured Hous., 148 F.3d at 1308; Tex. Manufactured Hous., 101 F.3d at 1104. The Court has noted that “major in-state interests adversely affected . . . [are] a powerful safeguard against legislative abuse.” Clover Leaf, 449 U.S. at 473 n.17.} Because of this disparity in impact, more business could potentially shift to local restaura-
teurs filling the gap created by an exclusionary fast food ordinance.\textsuperscript{261} However, under \textit{Clover Leaf}, facially nondiscriminatory regulations serving legitimate purposes do not violate the dormant Commerce Clause merely for shifting business to in-state enterprises.\textsuperscript{262} Local action will only violate the dormant Commerce Clause when the burden clearly outweighs the legitimate purposes behind the action.\textsuperscript{263} Courts have consistently found that legislative action resulting in a shift towards in-state business does not render the action void under the \textit{Pike} balancing approach.\textsuperscript{264}

The Clarksville ordinance also would not exclude out-of-state chains from operating within the local restaurant market.\textsuperscript{265} A national chain would not be entirely barred from operating a restaurant in Clarksville, rather they would be prohibited from operating a particular subset of the restaurant industry.\textsuperscript{266} The Supreme Court has held that there is no constitutionally protected right to operate a particular mode of business.\textsuperscript{267} It is the interstate market, rather than any particular businesses, that is protected from burdens on interstate commerce.\textsuperscript{268} Clarksville’s hypothetical ordinance would not exclude all out-of-staters from their local market.\textsuperscript{269} Out-of-state fast food chains, as well as local fast food restaurants, would be free to operate any other type of restaurant within Clarksville.\textsuperscript{270} In fact, many of the national fast food chains, such as McDonald’s and Wendy’s, are beginning to acquire and operate secondary restaurant chains that might avoid being classified as fast food restaurants.\textsuperscript{271} Major chains may thereby retain their competitive

\textsuperscript{261} See \textit{Clover Leaf}, 449 U.S. at 474.
\textsuperscript{262} Id.
\textsuperscript{264} See \textit{Clover Leaf}, 449 U.S. at 474; \textit{Exxon Corp.}, 437 U.S. at 127.
\textsuperscript{266} See \textit{Exxon}, 437 U.S. at 127–28; \textit{Wal-Mart}, 483 F. Supp. 2d at 1012.
\textsuperscript{267} See \textit{Exxon}, 437 U.S. at 127–28 (holding that the dormant Commerce Clause does not “protect[] the particular structure or methods of operation in a retail market . . . the Clause protects the interstate market, not particular interstate firms, from prohibitive or burdensome regulations”) (citation omitted); \textit{Wal-Mart}, 483 F. Supp. 2d at 1012 (holding that an ordinance prohibiting discount superstores did not violate the dormant Commerce Clause because it left the “market open to all local or foreign retailers . . . except in the discount superstore format”).
\textsuperscript{268} See \textit{Tex. Manufactured Hous.}, 101 F.3d at 1104 (quoting \textit{Exxon}, 437 U.S. at 127–28).
\textsuperscript{269} See \textit{Wal-Mart}, 483 F. Supp. 2d at 1017.
\textsuperscript{270} See \textit{Exxon}, 437 U.S. at 127; \textit{Wal-Mart}, 483 F. Supp. 2d at 1017.
advantage in the restaurant industry and continue to operate within municipalities adopting fast food zoning ordinances.\(^{272}\)

The Fifth and Eleventh Circuit Courts of Appeals decisions concerning zoning and the dormant Commerce Clause support the claim that a fast food zoning ordinance would be upheld.\(^{273}\) Fast food zoning would be akin to both the zoning ordinances at issue in *Georgia Manufactured Housing Ass’n v. Spalding County* and *Texas Manufactured Housing Ass’n v. City of Nederland*.\(^{274}\) In each case, zoning ordinances were in place that arguably discriminated against out-of-state manufactured home producers in favor “of the site-built home market, which, by its very nature, is local and therefore strictly in-state.”\(^{275}\) The courts rejected the notion that these zoning ordinances violated the dormant Commerce Clause, finding that the burdens were the same for both in-state and out-of-state businesses and that the claimants had not demonstrated that housing in the place of manufactured homes would be provided by in-state actors.\(^{276}\) While restaurants similarly operate to fill the food needs of a local community, restaurants are even less strictly in-state actors, as the restaurant industry is far more conducive to being managed by out-of-state corporations than on-site home construction.\(^{277}\) Accordingly, a fast food zoning ordinance would favor in-state business even less than the zoning ordinances that were challenged on the basis of discriminating against out-of-state business and upheld in *Georgia Manufactured Housing Ass’n* and *Texas Manufactured Housing Ass’n*.\(^ {278}\) As such, a fast food zoning ordinance would likely be upheld under the dormant Commerce Clause because any burden imposed on interstate commerce would not be clearly excessive relative to the local benefits.\(^{279}\)

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For instance, Wendy’s has a majority interest in a San Francisco-based, sit-down Italian restaurant chain, Pasta Pomodoro. Walkup, *supra*, at 25.

\(^{272}\) See Wal-Mart, 483 F. Supp. 2d at 1017.

\(^{273}\) See Ga. Manufactured Hous. Ass’n v. Spalding County, 148 F.3d 1304, 1308 (11th Cir. 1998); *Tex. Manufactured Hous.*, 101 F.3d at 1104.

\(^{274}\) See *Ga. Manufactured Hous.*, 148 F.3d at 1306; *Tex. Manufactured Hous.*, 101 F.3d at 1098.

\(^{275}\) See *Ga. Manufactured Hous.*, 148 F.3d at 1308; *Tex. Manufactured Hous.*, 101 F.3d at 1104.

\(^{276}\) See *Ga. Manufactured Hous.*, 148 F.3d at 1308; *Tex. Manufactured Hous.*, 101 F.3d at 1104.

\(^{277}\) See *Ga. Manufactured Hous.*, 148 F.3d at 1308; *Tex. Manufactured Hous.*, 101 F.3d at 1104.

\(^{278}\) See *Ga. Manufactured Hous.*, 148 F.3d at 1308; *Tex. Manufactured Hous.*, 101 F.3d at 1104.

CONCLUSION

A fast food zoning ordinance, predicated on public health grounds, would likely be upheld as a valid exercise of the police power. Fast food zoning would serve the legitimate state purpose of reducing the alarmingly high obesity rate in the United States. As a legitimate exercise of the police power to zone for the health, safety, and welfare, a zoning ordinance of this type would likely withstand a dormant Commerce Clause challenge. The burdens on interstate commerce would not be excessive in relation to the local benefits. A fast food zoning ordinance would not be motivated by economic protectionism, place costs on out-of-state interests not borne by in-state interests, or exclude out-of-state actors from a certain market.

The obesity epidemic has significantly strained the nation’s healthcare system. A change in the built environment, facilitated by zoning ordinances, could alter the landscape in our communities and result in more active, healthier lifestyles. Communities should be encouraged to enact creative solutions to a growing problem that has no end in sight.
REVISITING ASBESTOS-CONTAMINANT EXPOSURE, REGULATION, AND RECKONING: WHEN DEATH IS IN THE AIR

BIANCA FORDE*

Abstract: Amphibole and tremolite are related forms of contaminant asbestos that are extremely toxic in nature. However, the U.S. Environmental Protection Agency (EPA) has not specifically listed these asbestos forms in the Clean Air Act (CAA) or its implementing regulations because they are not commercially produced. This exclusion is difficult to justify in light of the well-established link between exposure to these contaminants and asbestos-related disease. This Note discusses the regulatory loophole created by the current CAA regulatory scheme and uses the pending criminal action against W.R. Grace & Company to expose the need for regulations in this area. This Note calls for EPA to promulgate explicit regulations on contaminant-asbestos. Absent regulatory action, this Note urges courts to interpret the CAA in accordance with congressional intent to ensure that the knowing emission of hazardous pollutants does not go unpunished.

Introduction

In November 1999, media reports documenting asbestos contamination in Libby, Montana prompted a U.S. Environmental Protection Agency (EPA) investigation.1 The investigation revealed that the asbestos contamination in Libby presented an imminent threat to public health.2 EPA linked the contamination to a vermiculite mining plant previously owned and operated by W.R. Grace & Company (Grace), and experts projected that clean-up costs would approach $179 million.

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by 2007.\textsuperscript{3} By February 2005, the date Grace was indicted, at least 1200 Libby residents suffered from “asbestos related pleural abnormalities” caused by exposure to Grace’s facility.\textsuperscript{4}

Criminal charges are now pending against Grace for knowing endangerment violations of the Clean Air Act (CAA), as well as obstruction of justice and wire fraud.\textsuperscript{5} Grace’s operation of the Libby Mine from 1963 through 1992 resulted in nationwide distribution of asbestos-contaminated ore and products to manufacturing plants, schools, and other facilities.\textsuperscript{6} Additionally, tests as early as 1969 revealed that Grace’s operations emitted 5000 pounds of asbestos daily.\textsuperscript{7} The health effects of this large-scale business activity continue to this day.\textsuperscript{8}

This Note discusses Grace’s involvement in Libby, Montana, and uses the Libby litigation as a backdrop for analyzing how EPA’s failure to specifically name certain asbestiforms in the CAA has lead to an ineffective regulatory regime, as well as injustice. Part I lays out Grace’s environmentally egregious actions in Libby, Montana, emphasizing Grace’s knowledge that the Libby vermiculite contained asbestos. Part II provides an overview of the CAA and its criminal provisions. Part III discusses asbestos’s place in the CAA regulatory scheme and explains the distinction between commercially and noncommer-


\textsuperscript{4} Indictment, supra note 2, at 427.


\textsuperscript{8} See Brief of Appellant, supra note 5, at 10 (noting that “more victims are expected to be discovered in the years to come”).
cially produced asbestos, noting EPA’s failure to regulate the latter. Part IV discusses the criminal proceedings against Grace, focusing on preliminary rulings that illustrate the practical effect of EPA’s regulatory failure. Finally, Part V looks to why regulation of asbestos contaminants through the CAA is essential, regardless of whether an incident like that in Libby is likely to be repeated.

I. The Libby Debacle

A. The Early Stages of Vermiculite Mining in Libby

Vermiculite describes the group of minerals formed when silicate minerals are exposed to groundwater.\(^9\) When heated at temperatures between 800 and 1100 degrees centigrade, vermiculite minerals acquire properties that are useful for fire proofing, insulation, and fertilizing products.\(^10\) Although the vermiculite found in the Libby mine possesses these properties, it is contaminated by rare and toxic forms of asbestos varieties known as amphibole and tremolite.\(^11\) These minerals are extremely dangerous once airborne.\(^12\) As such, the Libby asbestos did not pose a substantial health threat until vermiculite mining activities began.\(^13\)

Gold miners discovered the Libby vermiculite in the late 1800s.\(^14\) Experiments subsequently revealed that the ore had substantial commercial value.\(^15\) Thus, mining began in 1939 under the control of the


\[^10\] Indictment, supra note 2, at 418; U.S. Dep’t of Health & Human Serv., supra note 9, at 3.

\[^11\] Indictment, supra note 2, at 418.


\[^13\] Id. at 11 (acknowledging that human activities that disturb the minerals “elevated the concentrations of asbestos fibers in the breathing zone of residents and workers”); Schneider, Left to Die, supra note 7, at A4 (noting that tremolite laid harmless and undisturbed for eons until “mining . . . released the deadly asbestos fibers into the air”).


Zonolite Company.\textsuperscript{16} In 1963, Grace acquired control of the mine pursuant to a reorganization agreement.\textsuperscript{17} By that time, numerous state and federal authorities had cited the mine for emitting dangerous levels of asbestos.\textsuperscript{18} For instance, in 1941, the Montana State Board of Health initiated an investigation of the mine and “found problems with the amount of dust generated by the [mining] activity.”\textsuperscript{19} In 1956, the agency determined that asbestos was a component of the dust, and in 1962, the agency identified the asbestos as tremolite.\textsuperscript{20} At that time, “state officials were consulting with the Federal Department of Health, Education, and Welfare about the asbestos.”\textsuperscript{21} By 1961, the federal Department of the Interior, and the Bureau of Mines had commenced investigations as well.\textsuperscript{22} Grace continued mining until the early 1990s, even though tests revealed dangers imposed by the mining activity.\textsuperscript{23}

\section*{B. Tests Put Grace on Notice that the Vermiculite Posed Danger}

Grace began a series of tests beginning in the mid-1970s to determine the safety of its operation.\textsuperscript{24} From 1976 through 1978, Grace conducted a toxicological study in which hamsters were injected with tremolite fibers.\textsuperscript{25} The hamsters subsequently died of mesothelioma, indicating that the tremolite was dangerous.\textsuperscript{26} In 1977, Grace hired a consulting firm to review and compare chest x-rays of Libby miners to those of miners from Grace’s vermiculite mine in Enoree, South Carolina.\textsuperscript{27} The comparison revealed a higher incidence of asbestos-related disease among Libby miners.\textsuperscript{28} In 1982, Grace hired an expert to conduct a mortality study in which sixty-six death certificates of former

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{16} Indictment, \textit{supra} note 2, at 420; History of the Libby, Montana Area, \textit{supra} note 15.
  \item \textsuperscript{17} Indictment, \textit{supra} note 2, at 420.
  \item \textsuperscript{18} \textit{EPA Action Report}, \textit{supra} note 14, at 3–4.
  \item \textsuperscript{19} \textit{Id.} at 3.
  \item \textsuperscript{20} \textit{Id.} This form of asbestos is considered especially carcinogenic because of the ease with which its needle-like fibers penetrate the lungs. Schneider, \textit{Left to Die}, \textit{supra} note 7, at A4.
  \item \textsuperscript{21} \textit{EPA Action Report}, \textit{supra} note 14, at 3.
  \item \textsuperscript{22} \textit{Id.} at 4.
  \item \textsuperscript{23} \textit{See} Brief of Appellant, \textit{supra} note 5, at 7–9.
  \item \textsuperscript{24} \textit{See United States v. Grace (Grace II)}, 455 F. Supp. 2d 1156, 1159 (D. Mont. 2006); Indictment, \textit{supra} note 2, at 435–36. These tests established that, when disturbed, the tremolite released dangerous asbestiforms into the ambient air. \textit{Id.}
  \item \textsuperscript{25} \textit{Grace II}, 455 F. Supp. 2d at 1159.
  \item \textsuperscript{26} \textit{Id.; Indictment, \textit{supra} note 2, at 426. Grace prohibited the results of this study from being published. \textit{Id.}
  \item \textsuperscript{27} \textit{Grace II}, 455 F. Supp. 2d at 1159.
  \item \textsuperscript{28} Indictment, \textit{supra} note 2, at 437. There was only one case of clear asbestos disease and a few possible cases in South Carolina. \textit{Id.}
\end{itemize}
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Libby workers were examined. The study indicated that respiratory cancer caused the deaths of an excessive number of Libby miners. Air monitoring tests revealed that routine occupational activities at the mine released “high levels of asbestos fibers” into the air. Product tests put the company on notice that its products released asbestos into the air when used as expected. Further, Grace had reason to know that its nationwide distribution of vermiculite resulted in harmful effects elsewhere. For instance, in 1982, an expert advised the company that Ohio miners previously exposed to Libby vermiculite concentrate were experiencing a “bloody pleural effusion problem.”

Although aware of the dangers caused by occupational exposure, the company took action that endangered the wider community as well. The mine operation resulted in occasional spills, a number of processing errors, and excess supply. The company merely stored the spilled, erroneously processed, and excess vermiculite on the “grounds of the screening plant.” The company did not implement safeguards to protect the public. Further, without disclosing the existence of a health hazard, the company used the vermiculite as foundation for a junior high school track and an elementary school skating rink. When the company finally ceased operations, it sold the plant without disclosing the contamination. Additionally, when EPA arrived in 1999, Grace’s officials attempted to cover up the contamination, causing additional risk to public health.

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29 Id. at 440.
30 Id.
31 Id. at 445–46.
32 Id. at 445.
33 See id. at 440.
34 Indictment, supra note 2, at 440.
35 U.S. Gov’t ACCOUNTABILITY OFFICE, supra note 7, at 4.
36 Indictment, supra note 2, at 421.
37 Id.
38 Schneider, Left to Die, supra note 7, at A4 (“Dust from the stacks blanketed the nearby mine buildings, where most of the workers were . . . some days, when the east wind blew, sheets on the clotheslines of Libby would be covered in the dust, and children would write their names in the dust on their parents’ cars.”).
39 Indictment, supra note 2, at 421.
40 Id. at 453.
41 See id. at 456.
C. Enter EPA: Investigation and Cleanup

EPA commenced an investigation of the Libby site following media allegations of asbestos contamination.\(^{42}\) According to the agency, its “first priority was to assess the . . . risk to public health” and to take steps to enhance safety.\(^{43}\) EPA’s investigation focused on the mining facility, as well as schools, residential areas, and other possible contaminated places nearby.\(^{44}\) EPA found vermiculite “in piles or mixed in the sodded areas outside [of residences]” and determined that various local elementary, middle, and high school facilities were contaminated.\(^{45}\) Additionally, EPA agents ordered the closing and repaving of roads used to transport the vermiculite to prevent asbestos in the soil from becoming airborne.\(^{46}\) In October 2002, EPA added Libby to its National Priorities List.\(^{47}\) Notwithstanding these efforts, EPA admitted that some “isolated-pockets of vermiculite” might be missed during cleanup activities.\(^{48}\)

A recent assessment of EPA activity in Libby indicated that cleanup efforts have not been as effective as anticipated.\(^{49}\) “EPA has neither planned nor completed a risk and toxicity assessment of the Libby amphibole . . . thus [it] cannot be sure that ongoing Libby cleanup is sufficient to prevent humans from contracting asbestos-related diseases.”\(^{50}\) The most susceptible members of the population are previously exposed adults, smokers, and children.\(^{51}\) Consequently, although the mine is no longer in operation, suffering, disease, and death continue in Libby, which begs the question, why were the criminal charges al-

\(^{42}\) Libby Asbestos, supra note 1.

\(^{43}\) Id.


\(^{45}\) Montana DEQ/Libby Update 5-22-01 EPA Response, supra note 44, at 2–3.

\(^{46}\) Id.

\(^{47}\) Libby Asbestos, supra note 1. The EPA National Priorities List guides EPA in determining what sites pose health risks, orchestrating remedial actions, notifying the public of possible health risks, and informing potentially responsible parties that they may be liable for clean-up costs. Id.


\(^{50}\) Toxicity Report, supra note 49, at 2.

\(^{51}\) Id. at 3.
most dismissed.\textsuperscript{52} The answer lies in the way EPA currently defines and regulates asbestos under the CAA.\textsuperscript{53}

II. An Overview of the CAA

A. The CAA Generally

Congress enacted the CAA to counter the effects of industrial growth, population growth, and increased motor-vehicle use on the quality of the nation’s air.\textsuperscript{54} The purpose of the Act is “to protect and enhance the quality of the Nation’s air resources,” agriculture, and livestock.\textsuperscript{55} Congress further intended the CAA to promote the health and general welfare of the nation’s citizens.\textsuperscript{56} The statute relies on cooperation between the states and the federal government to achieve these goals and gives each state “primary responsibility” for achieving air quality standards.\textsuperscript{57} Standards set by EPA are to “accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare” that can be expected from the presence of a particular pollutant in the air.\textsuperscript{58} If scientific knowledge is limited, EPA may “err on the side of over-protection” to ensure an adequate margin of safety, as long as its conclusions are supported by the record.\textsuperscript{59}

Scientific risk assessments account for the separate standards governing pollutants designated as either criteria pollutants or those listed as hazardous air pollutants (HAPs).\textsuperscript{60} Criteria pollutants are those that EPA considers a danger to public health and welfare.\textsuperscript{61} They include carbon monoxide, particulate matter, sulfur dioxide, nitrogen dioxide,
ozone, and lead.62 HAPs, on the other hand, are those pollutants that EPA has listed because of their tendency to adversely affect human health or the environment through inhalation or some alternate means of exposure.63 Promulgating regulations under the CAA is therefore a two-step process: first, EPA must set technology-based standards, “which require major stationary sources to meet emission limitations by using maximum achievable control technology,”64 and second, EPA must determine the remaining health risks and regulate accordingly.65 Both categories include pollutants specifically listed in the text, as well as those added pursuant to statutory provisions.66 Violating CAA regulations can result in a variety of penalties, including criminal penalties, which “typically . . . constitute the pinnacle of the enforcement pyramid.”67

B. The Criminal Provisions of the CAA

Prior to Congress’s creation of environmental felonies, most environmental law violators received de minimis pollution penalties.68 Accordingly, companies often found it more cost effective to illegally dump and risk fines than to spend the money necessary to properly process wastes.69 Eventually, the societal impact of this corporate cost-benefit analysis became too great, and Congress amended environmental statutes by providing for criminal punishment.70 Congress in-

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62 Id. at 115 n.53; see National Primary and Secondary Ambient Air Quality Standards, 40 C.F.R. § 50 (2006).
63 42 U.S.C. § 7412(b)(1)-(2); Mandiberg & Smith, supra note 61, at 115.
64 Goal Setting, supra note 60.
65 Id.
66 42 U.S.C. § 7409(d)(2)(A)-(C) (noting that the Administrator is to establish a committee responsible for periodically reviewing criteria pollutant standards); see id. § 7412(b)(2) (“The Administrator shall periodically review the list established . . . and, where appropriate, revise such list by rule, adding pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects.”).
67 See Mandiberg & Smith, supra note 61, at 107.
68 See Dick Thornburgh, Criminal Enforcement of Environmental Laws—A National Priority, 59 Geo. Wash. L. Rev. 775, 775 (1991) (“For businesses, governments, and most citizens, pollution seemed a small price to pay, both in terms of the cost to the environment and in terms of public spending.”).
69 Id.
70 Id. at 775–76. Congress decided that the social costs of pollution were too high once medical waste and sewage began to wash ashore, drinking water became contaminated, and radioactive waste threatened health and welfare. Id; see David W. Case, Changing Corporate Behavior Through Environmental Management Systems, 31 Wm. & Mary Envtl. L. & Pol’y Rev. 75, 92 (2006) (“Criminal provisions were added to various federal environmental statutes throughout the 1970s. However, the ‘American phenomenon’ of the ‘criminalization of environmental law’ did not commence in earnest until the late 1980s and into the 1990s . . . after Congress created environmental felonies . . . .”).
tended these penalties to force dramatic changes, rather than codify existing norms of behavior. The 1990 Amendments to the CAA, for example, increased the scope of criminal and civil violations, as well as monetary fines and jail terms; introduced a new framework for imposing penalties; alerted corporate officers of their potential for liability; and encouraged citizen suits.

The criminal provisions of the CAA are located in § 7413(c), which: (1) lays out the requirements for establishing a knowing violation of an implementation plan; (2) provides for knowingly making false material statements, representations, or certifications, and also for the omission, altering, or concealing of material information, and negligent upkeep of records; (3) addresses the knowing failure to pay any fee owed to the United States; (4) penalizes the negligent release of any HAP or hazardous substance into the ambient air; and (5) penalizes knowing, intentional releases. Section 7413(c)(5)(A) provides:

Any person who knowingly releases into the ambient air any hazardous air pollutant listed pursuant to section 7412 of this title or any extremely hazardous substance listed pursuant to section 11002(a)(2) of this title that is not listed in section 7412 of this title, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 or by imprisonment of not more than 15 years, or both.

Therefore, establishing a claim under § 7413(c)(5) requires proving that the accused knowingly caused another to be placed in imminent danger by releasing a HAP or extremely hazardous substance into the ambient air. HAPs include air pollutants listed in § 7412, as well as substances added pursuant to § 7412, as well as substances added pursuant to § 7112(b)(2) & (3) and regulations codified at 40 C.F.R. § 61.01. Courts have construed the provision so as

71 Case, supra note 70, at 79 (noting that environmental law is an “activist form of government . . . requiring innovative alternatives to traditional environmental regulatory approaches”); see Richard J. Lazarus, Meeting the Demands of Integration in the Evolution of Environmental Law: Reforming Environmental Criminal Law, 83 GEO. L.J. 2407, 2421–22 (1995) (stating that environmental laws “reflect the nation’s aspirations for environmental quality”).


74 42 U.S.C. § 7413(c)(5)(A) (emphasis added). Ambient air is defined simply as unconfined, open air. EPA ACTION REPORT, supra note 14, at 6. EPA does not have a National Ambient Air Quality (NAAQ) standard for asbestos. Id.

75 42 U.S.C. § 7413(c)(5); Mandiberg & Smith, supra note 61, at 132.

76 Mandiberg & Smith, supra note 61, at 133 n.162.
not to require that defendants be aware that they are acting in violation of any law.\textsuperscript{77} To date, CAA criminal enforcement provisions focus almost exclusively on asbestos regulation.\textsuperscript{78}

III. ASBESTOS, THE REGULATORY SCHEME OF THE CAA, AND THE EXCLUSION OF CERTAIN CONTAMINANTS

A. The Nature of Asbestos

The term asbestos is used to describe “a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength.”\textsuperscript{79} Asbestos is comprised of microscopic fibers that can “become airborne when asbestos-containing materials are damaged or disturbed.”\textsuperscript{80} Although any inhalation of airborne asbestos fibers increases the risk of developing an asbestos-related disease, asbestos fibers are even more dangerous when they remain lodged in the lungs.\textsuperscript{81}

The three diseases most commonly associated with asbestos exposure are malignant mesothelioma, lung cancer, and asbestosis.\textsuperscript{82} Malignant mesothelioma is a cancer of the lungs’ pleural lining.\textsuperscript{83} Lung cancer is cancer of the lung tissue.\textsuperscript{84} Asbestosis is the scarring of the lung, resulting in decreased lung function.\textsuperscript{85} All three diseases are characterized by long latency periods following initial exposure.\textsuperscript{86} Consequently, an asbestos-related disease may be present for years before symptoms emerge.\textsuperscript{87} Those exposed to asbestos today will “continue to suffer and eventually die decades into the future.”\textsuperscript{88}


\textsuperscript{78} Mandiberg & Smith, \textit{supra} note 61, at 123.


\textsuperscript{80} Id.

\textsuperscript{81} Brief of Appellant, \textit{supra} note 5, at 6; Jennifer L. Leonardi, Comment, \textit{It’s Still Here! The Continuing Battle Over Asbestos in America}, 16 VILL. ENVTL. L.J. 129, 133 (2005) (“Significant health concerns arise when asbestos is inhaled in high concentrations over an extended period of time.”). It is important to note that the Libby asbestos’s needle-like fibers facilitate lung penetration. Schneider, \textit{Left to Die}, \textit{supra} note 7, at A4.

\textsuperscript{82} Leonardi, \textit{supra} note 81, at 133.

\textsuperscript{83} Id.

\textsuperscript{84} Id.

\textsuperscript{85} Id.

\textsuperscript{86} U.S. Gen. Accounting Office, \textit{supra} note 3, at 4 (“Asbestos-related maladies rarely occur in less than ten years after first exposure.”); see Leonardi, \textit{supra} note 81, at 134.

\textsuperscript{87} U.S. Gen. Accounting Office, \textit{supra} note 3, at 4; Leonardi, \textit{supra} note 81, at 134.

\textsuperscript{88} Leonardi, \textit{supra} note 81, at 134.
Even though there is no safe level of asbestos exposure, insufficient data on certain asbestiforms continues to stifle effective asbestos regulation.\textsuperscript{89} Currently, there is no uniform classification system for asbestiforms.\textsuperscript{90} According to the Mine Safety Health Administration (MSHA), “[M]ineral names are not applied in a uniform manner and are not all consistent with presently accepted mineralogical nomenclature and definitions.”\textsuperscript{91} Similarly, the U.S. Department of Health and Human Services acknowledges that “toxicological information is currently limited and the exact level of health concern for different sizes and types of asbestos remains controversial.”\textsuperscript{92} These limitations make it difficult to classify all asbestiforms according to health risk.\textsuperscript{93} Since efforts to reduce environmental risk “should be based on the best available scientific information,” limitations on science have similarly impeded agency responsiveness.\textsuperscript{94}

B. CAA Regulation of Asbestos: The National Emissions Standards for Hazardous Air Pollutants

EPA established the National Emissions Standards for Hazardous Air Pollutants (NESHAP) pursuant to § 7412 of the CAA.\textsuperscript{95} This section requires EPA to set national emissions standards for all major and area sources of HAPs.\textsuperscript{96} Major sources are defined as “any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit . . . 10 tons per year or more of any hazardous air pollutant.”\textsuperscript{97} An area source is defined as “any stationary source of hazardous air pollutants that is not a major source.”\textsuperscript{98}

\textsuperscript{89}Indictment, \textit{supra} note 2, at 426; \textit{U.S. Dep’t of Health & Human Serv.}, \textit{supra} note 9, at 10.
\textsuperscript{90}Asbestos Exposure Limit, 70 Fed. Reg. 43,950, 43,952 (July 29, 2005) (to be codified at 30 C.F.R. pts. 56, 57, 71).
\textsuperscript{91}\textit{Id}.
\textsuperscript{92}\textit{U.S. Dep’t of Health & Human Serv.}, \textit{supra} note 9, at 10.
\textsuperscript{93}EPA Action Report, \textit{supra} note 14, at 18; \textit{U.S. Dep’t of Health & Human Serv.}, \textit{supra} note 9, at 10.
\textsuperscript{94}EPA Action Report, \textit{supra} note 14, at 18. Whether or not this reliance on scientific data is justified is discussed below. See discussion \textit{infra} Part V.B.1–3.
\textsuperscript{96}\textit{Id}.
\textsuperscript{97}Clean Air Act, 42 U.S.C. § 7412(a)(1) (2000); United States v. Grace (\textit{Grace II}), 455 F. Supp. 2d 1122, 1125 n.3 (D. Mont. 2006); Asbestos Informer, \textit{supra} note 95.
\textsuperscript{98}42 U.S.C. § 7412(a)(2); \textit{Grace II}, 455 F. Supp. 2d at 1125 n.3.
EPA promulgated the first NESHAP regulation governing asbestos in 1973.99 The NESHAP for asbestos covers “milling to produce commercial asbestos, manufacturing, and fabrication of products that contain commercial asbestos.”100 Asbestos is commercial when it is milled or produced for its commercial value.101 In contrast, amphiboles and other naturally occurring contaminants are not covered because they are emitted only incidentally.102 Because the Libby asbestos is not commercially produced, it is not explicitly regulated by the CAA.103 Scholars find it difficult to explain the basis for EPA’s distinction between commercial and noncommercial asbestos, except to note that EPA lacked requisite knowledge of asbestos contaminants when it implemented the NESHAP program.104

C. EPA Pleas Insufficient Data on Contaminant Asbestos

When EPA created the NESHAP “little was known about the extent and effects of contaminant asbestos.”105 Thus, EPA officials initially focused on commercial asbestos products and stated their intent to address contaminant-asbestos regulation in the future.106 A separate contaminant-asbestos NESHAP would have explicitly covered emissions from “beneficiation processes and exfoliation plants, such as the Libby mine.”107 However, EPA has not promulgated new regulations despite numerous indications of the dangers posed by amphiboles and other contaminants.108

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100 Id.; see Asbestos Informer, supra note 95 (“On March 31, 1971, EPA identified asbestos as a hazardous pollutant, and on April 6, 1973, EPA promulgated the Asbestos NESHAP in 40 CFR Part 61, Subpart M.”). The NESHAP also covers the renovation and demolition of structures containing asbestos, and asbestos waste disposal requirements. EPA Action Report, supra note 14, at 5.
101 EPA Action Report, supra note 14, at 5.
103 EPA Action Report, supra note 14, at 5.
104 Id. The fact that asbestos contaminants are not regulated seems primarily, if not completely, due to the fact that EPA had insufficient data on contaminants when it implemented the NESHAP program. Id. “When Congress listed asbestos as a HAP in section 112(b)(1), it did not further explain the term in the statute, and EPA is not aware of any legislative history addressing the term asbestos.” National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing, 68 Fed. Reg. at 61,881.
105 EPA Action Report, supra note 14, at 5.
106 Id.
107 Id. at 5–6.
108 See A Bill to Amend the Clean Air Act to Provide for Attainment and Maintenance of Health Protective National Ambient Air Quality Standards, and for Other Purposes, S.
For instance, the U.S. Court of Appeals for the Eighth Circuit, in *Reserve Mining Co. v. EPA*, put EPA on notice that asbestos contaminants were carcinogenic.\(^{109}\) In *Reserve Mining Co.*, the United States and the State of Montana sought an injunction preventing the Reserve Mining Company from discharging amphibole-contaminated taconite tailings into the ambient air.\(^{110}\) The district court “granted the requested relief and ordered that the discharges immediately cease, thus effectively closing the plant.”\(^{111}\) On appeal, the Eighth Circuit held that the order, effectively closing the plant, was unreasonable.\(^{112}\) Although there were notable similarities between amphiboles and regulated asbestiforms, the court refused to close the plant without additional data linking the former to health risk.\(^{113}\) The *Reserve Mining Co.* decision is significant because it gave EPA reason to study the effects of contaminant asbestos in 1975 in order to establish a link between contaminant-asbestos exposure and health risk, or at least prove that no such link existed.\(^{114}\) EPA, however, elected not to act.\(^{115}\)

EPA similarly overlooked congressional direction to study contaminant asbestiforms.\(^{116}\) In 1990, the U.S. Senate discussed Senate Bill 1630, an amendment to the CAA, directing EPA to conduct a study evaluating health effects of serpentine and amphibole asbestiforms.\(^{117}\) The amendment also required the administration to issue “statutory or regulatory changes” should the study reveal a necessity for such changes.\(^{118}\) The relevant portion of the amendment read as follows:

“The Administrator in conjunction with the Health Effects Institute shall conduct a study to identify, characterize, and quantify risks to human health from exposure to each form of asbestos, including but not limited to the health effects of

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1630, 102d Cong. § 216 (1990) [hereinafter CAA Bill]; Reserve Mining Co. v. EPA, 514 F.2d 492, 499 (8th Cir. 1975).

109 *Reserve Mining Co.*, 514 F.2d at 499.

110 *Id.* The United States and the State of Montana also sought relief for taconite tailings discharged into Lake Superior. *Id.*

111 *Id.*

112 *See id.* at 500.

113 *Id.* at 500, 520.

114 *See id.* at 520 (“[T]he significance of the risk can only be ascertained through knowledge of the threatened harm.”).

115 *See CAA Bill, supra* note 108. If EPA had taken regulatory action following *Reserve Mining Co.*, Congress would not have had to direct EPA to further study asbestos contaminants in Senate Bill 1630. *See id.*

116 *Id.*

117 *Id.*

118 *Id.*
serpentine and amphibole fibers, and report to Congress within twenty-four months after enactment of this section. Not later than 90 days after completion and submission of such study, the Administrator shall report to Congress with recommendations for modifications or changes, if any, to statutory or regulatory requirements under this Act. Such recommendations shall be based on the findings of the study prepared under this section and such other information as the Administrator deems appropriate.\textsuperscript{119}

Although this bill addressed contaminant asbestos to some extent, it was more heavily focused on asbestos abatement in schools and assessing removal costs.\textsuperscript{120} As such, EPA’s interest in regulating contaminants was suppressed by the necessity and expense of implementing the NESHAP.\textsuperscript{121} Consequently, although the amphibole asbestos found in Libby is far more toxic than other asbestiforms currently subject to EPA regulation, it remains unlisted in the regulations because it is deemed noncommercial.\textsuperscript{122} Scholars find EPA’s unwillingness to regulate this asbestiform particularly troubling in light of the fact that amphibole is regulated elsewhere around the world and, in some instances, is banned.\textsuperscript{123} “More than thirty other countries around the world have recognized the harmful effects of asbestos exposure and have banned, or are in the process of banning, [asbestos-containing materials].”\textsuperscript{124} The consequence of EPA’s failure to follow suit is that those responsible for these emissions are effectively granted a free pass to pollute.\textsuperscript{125}

EPA’s failure to regulate these contaminants under the CAA, or any other regulatory scheme, creates a loophole through which crimi-
nal defendants may avoid prosecution.\textsuperscript{126} Evasion of the statute is permitted because of an unexplained distinction between commercial and noncommercial asbestos.\textsuperscript{127} The government’s pending action against Grace for CAA violations is evidence of this result.\textsuperscript{128}

IV. THE SAGA OF \textit{UNITED STATES v. GRACE}: ILLUSTRATION OF A CAA LOOPHOLE

A. \textit{The District Court’s Harmful Errors}

EPA’s investigation of the Libby site revealed that “the conditions at the site presented an imminent and substantial threat to human health and the environment.”\textsuperscript{129} After EPA linked the contamination to Grace, the United States filed a ten-count criminal indictment against Grace and seven of its current and former corporate officers for committing knowing endangerment violations of the CAA.\textsuperscript{130} In March 2006, the defendants sought dismissal in the U.S. District Court for the District of Montana on numerous grounds, including failure to specify the nature of the substance released.\textsuperscript{131} The challenge was based on the parties’ contradicting definitions of the term asbestos.\textsuperscript{132} The court initially found the disagreement unrelated to the issue of dismissal.\textsuperscript{133} However, in its August 2006 order, the court adopted a definition of asbestos to prevent the jury from hearing “lengthy and potentially confusing [expert] testimony” on asbestos’s mineralogy.\textsuperscript{134}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{126} \textit{Grace II}, 455 F. Supp. 2d at 1132–33. Because EPA had not issued regulations explicitly covering asbestos contaminants, the court would not impose criminal liability. \textit{Id.}
\item \textsuperscript{127} \textit{See id.; EPA Action Report, supra note 14, at 5.}
\item \textsuperscript{128} \textit{See Brief of Appellant, supra note 5, at 18–19, 26–34.}
\item \textsuperscript{129} \textit{Indictment, supra note 2, at 423.}
\item \textsuperscript{130} \textit{Brief of Appellant, supra note 5, at 13.}
\item \textsuperscript{131} \textit{United States v. Grace (Grace I)}, 429 F. Supp. 2d 1207, 1238 (D. Mont. 2006). The defendants’ arguments for dismissal included: alleged duplicity in the superseding indictment; violation of their Fifth & Sixth Amendment rights; failure to allege a required element of knowing endangerment claim; failure to allege the breach of an emissions standard; failure to sufficiently apprise the defendants of the nature of the offense charged; statute of limitations and duplicity violations; and failure to state a wire-tapping offense. \textit{Id.} at 1219–45. The district court ruled in favor of the government, except with regard to the latter two charges. \textit{See id.} at 1247.
\item \textsuperscript{132} \textit{Id.} at 1238.
\item \textsuperscript{133} \textit{Id.}
\item \textsuperscript{134} \textit{United States v. Grace (Grace II)}, 455 F. Supp. 2d 1122, 1126 (D. Mont. 2006).
\end{itemize}
\end{footnotesize}
1. The Parties Seek a Ruling on the Congressionally Intended Meaning of Asbestos

In August 2006, both parties filed motions in limine urging the court to uphold opposing definitions of asbestos under the statute. The government argued for a broad definition of asbestos that would include all of the minerals in the Libby amphibole. In contrast, the defendants urged the court to apply the definition set forth in the regulations implementing the CAA, thereby excluding most of the government’s evidence. The defendants argued that the government’s definition would create two definitions of asbestos within the same statute. Specifically, releases from regulated sources would constitute asbestos if they were of the nature specified in the regulations. A broader definition, however, would apply to releases from unregulated sources. The court turned to the rules of statutory interpretation to ascertain Congress’s intended meaning of the term asbestos.

2. The August 8, 2006 Order Adopts the Definition of Asbestos Proposed by the Defendants

The court’s application of the canons of statutory interpretation in its August 8, 2006 order resulted in the adoption of the defendants’ proposed definition. The court determined that the CAA presented an ambiguity on the matter of how asbestos should be defined. The court further held that the principle of lenity required resolving ambiguities within criminal statutes in favor of the defendants. As such, the court determined that:

[A]n intolerable risk of unfair prejudice [would result] should the government be allowed to put on expert after expert testifying that the Defendants endangered others through the release of a deadly composite of minerals without stating with any certainty what percentage of the minerals released are

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135 Id. at 1124.  
136 Id. at 1122, 1124.  
137 Id. at 1124.  
138 Id. at 1129.  
139 Id.  
139 Grace II, 455 F. Supp. 2d at 1129.  
140 Id. at 1126–27.  
141 See id. at 1132–33 (excluding the government’s evidence).  
142 Id. at 1132.  
143 Id.  
144 Id.
covered by the criminal statute under which the defendants are charged.\textsuperscript{145}

Therefore, although the knowing endangerment provision explicitly refers to § 7412—which lists asbestos as a HAP, and does not distinguish among asbestos varieties—the court found that the government’s position would violate the principle of lenity.\textsuperscript{146} This order prevented the government from admitting scientific evidence and expert testimony on samples taken from Libby that are \textit{commingled} with unregulated asbestos.\textsuperscript{147}

3. The Government Appeals

The government filed an appeal in the U.S. Court of Appeals for the Ninth Circuit on August 23, 2006.\textsuperscript{148} The appeal focused largely on the district court’s misreading of the CAA and the court’s conclusions after applying the cannons of statutory interpretation.\textsuperscript{149} The government argued that the district court mistakenly applied a narrower definition of asbestos found in NESHAP regulations even though NESHAP “does not \ldots apply to Grace’s Libby operations.”\textsuperscript{150} On appeal, the Ninth Circuit considered whether this evidentiary exclusion was proper.\textsuperscript{151}

4. The Ninth Circuit Reverses and Remands

On September 20, 2007, the Ninth Circuit reversed the district court’s order and adopted the definition of asbestos found in § 7412(b).\textsuperscript{152} The Ninth Circuit held that, absent a statutory definition,
the term asbestos must be construed according to its ordinary meaning. Finding the common meaning of asbestos unambiguous, the Ninth Circuit concluded that the lower court erred in invoking the leniency principle. Additionally, the court emphasized the validity of Congress’s use of “multiple enforcement mechanisms” to achieve its objectives. For instance, two enforcement mechanisms comprise the CAA, one civil and the other criminal. The former regulates major sources of HAPs and, therefore, focuses strictly on commercial asbestiforms. The latter, however, focuses on public health risk. The Ninth Circuit determined that where a threat to health exists, the source of the emission is irrelevant. Therefore, there were no grounds for permitting emissions of deadly asbestiforms simply because they were, and continue to be, noncommercially produced.

Although the Ninth Circuit restored justice in some sense, the saga continues. The September 2007 order only places the knowing endangerment query back into the hands of a jury. Absent regulation, the same result could be achieved at trial through “different means.”

V. Restoring Justice by Revising Outdated Regulations

A. Regulation of Contaminant Asbestos Is the Best Possible Redress

To date, EPA does not regulate asbestos contaminants despite numerous indications that such regulation is needed. EPA attributes its

\[153\] Id. at 755. The court understood the ordinary meaning of asbestos to be a “fibrous, non-combustible compound that can be composed of several substances, typically including magnesium.” Id.

\[154\] Id. at 755–56.

\[155\] Id. at 756.

\[156\] Id.

\[157\] Id.

\[158\] See id. (“The direct enforcement mechanism created in 42 U.S.C. § 7413 focuses on risks to health. Therefore it provides oversight of release of hazardous pollutants whether or not they come from major sources of pollution.”).

\[160\] See id. at 756–57.

\[161\] Id. The court reversed the district court’s order limiting the government’s evidence to minerals covered by the civil regulations. Id.; see Andrew Schneider, Big Asbestos Prosecution in Jeopardy, U.S. Argues, SEATTLE POST-INTELLIGENCER, Jun. 5, 2007, at A7, available at http://seattlepi.nwsource.com/local/318479_grace05.html [hereinafter Schneider, Asbestos Prosecution]

\[162\] Schneider, Asbestos Prosecution, supra note 161, at A7.

\[163\] See U.S. DEP’T OF HEALTH & HUMAN SERV., supra note 9, at 1, 4, 8, 18 (illustrating the dangers of contaminant asbestos in St. Louis resulting from Libby contaminated vermiculite); U.S. GEN. ACCOUNTING OFFICE, supra note 3, at 5–7 (laying out numerous inci-
regulatory failure to scientific uncertainty, competing regulatory priorities, and fragmented agency authority. However, in light of the risks posed by amphiboles and the potential for future exposure, these justifications are inadequate. Therefore, EPA should take regulatory action rather than relying on after-the-fact efforts such as “aggressive Superfund cleanup” and judicially imposed remedies. EPA is aware of the need for regulations in this area. In the early 1970s, EPA lacked the information needed to draft regulations for asbestos contaminants. As a result, EPA chose to focus on drafting regulations for commercial asbestos, revisit regulating asbestos contaminants at a later time, and implement a separate NESHAP if necessary. A separate NESHAP would have “regulated emissions from beneficiation processes and exfoliation plants,” such as Libby. However, the effort to regulate contaminants dissipated when “resources were needed to implement the Clean Air Act Amendments of 1990.”

Shortly thereafter, the Reserve Mining Co. v. EPA decision indicated that the need to study and regulate asbestos contaminants remained. In

165 See Agency for Toxic Substances & Disease Registry, Chemical-Specific Health Consultation: Tremolite Asbestos and Other Related Types of Asbestos 8–9 (2001), available at http://www.umt.edu/libbyhealth/science/online_resources/atsdr_health_consultation.htm (observing that asbestos contaminants can still be found in crayons, garden products, and other commercial items); Schneider, Left to Die, supra note 7, at A4.
166 EPA Action Report, supra note 14, at 5 (acknowledging EPA’s clean-up effort but failure to address prevention); see Agency for Toxic Substances & Disease Registry, supra note 165, at 2 (referencing “proposals . . . to consider changing U.S. asbestos regulations to include other asbestiform amphiboles”).
169 Id. “EPA at this time believes that asbestos releases from the milling of such ores should be covered by the hazardous air pollutant regulations and intends in the near future to propose for comment regulations which would accomplish this.” 39 Fed. Reg. 15,397 (May 3, 1974).
171 Id.
172 Reserve Mining Co. v. United States, 514 F.2d 492, 519–20 (8th Cir. 1975). “[W]e cannot say that Reserve’s [emissions] should be considered asbestos for the purposes of this regulation . . . . At the most, asbestos occurs as a contaminant in a component . . . . of the taconite that Reserve processes to produce iron ore pellets.” Id. at 525. It should be noted that EPA’s neglect of contaminants prevents states from adequately addressing these contaminants. See id. at 526 (refusing to provide a remedy under a state statute because the EPA manufacturing standard applied).
that case, regulatory inaction prevented the court from implementing a
drastic—but necessary—remedy.\textsuperscript{173}

In 1978, “EPA learned that workers at a chemical fertilizer plant in
\ldots Ohio, were exhibiting symptoms of asbestos-related diseases.”\textsuperscript{174} Libby vermiculite was believed to be the source of the contamination.\textsuperscript{175} In response, EPA “issue[d] a series of reports on the potential risk of
asbestos-contaminated vermiculite.”\textsuperscript{176} The first report claimed that EPA
lacked sufficient data to assess the risks associated with asbestos-
contaminated vermiculite.\textsuperscript{177} The second report outlined options for
regulatory action.\textsuperscript{178} The third acknowledged that occupational exposure
to the contaminated vermiculite had adverse affects on miners’
health.\textsuperscript{179} The fourth and final report described the results of tests conducted on air and soil samples taken from three major U.S. vermiculite
mining sites.\textsuperscript{180} In 1985, EPA released yet another report, titled, \textit{Exposure Assessment for Asbestos-Contaminated Vermiculite}, which determined that the
operation of a St. Louis mine—also used for Libby vermiculite processing—could result in airborne emissions.\textsuperscript{181} None of these reports trig-
gerated regulatory action by EPA, and the issue remained unaddressed
until the 1990 CAA amendment legislative debates, when Congress in-
structed EPA to research the effects of asbestos contaminants.\textsuperscript{182}

In 1994, a Libby citizen notified EPA “that dust from the site \ldots
was harming Libby residents.”\textsuperscript{183} Although EPA referred the complaint
to the state agency, “[T]he state did not take any action because the
asbestos found in the vermiculite at the site \ldots was not considered
commercial asbestos.”\textsuperscript{184} EPA informed the complainant that it did not intend to investigate.\textsuperscript{185} In 1996, a second complaint was filed.\textsuperscript{186} Although EPA was required to “conduct a preliminary assessment” within

\begin{thebibliography}{186}
\bibitem{173} Id. (ordering abatement, not closure, on reasonable terms).
\bibitem{174} U.S. GEN. ACCOUNTING OFFICE, supra note 3, at 6.
\bibitem{175} Id.
\bibitem{176} Id.
\bibitem{177} Id.
\bibitem{178} Id.
\bibitem{179} Id.
\bibitem{180} U.S. GEN. ACCOUNTING OFFICE, supra note 3, at 6.
\bibitem{181} U.S. DEP’T OF HEALTH & HUMAN SERV., supra note 10, at 7. The St. Louis facility is
“known to have processed at least 139,460 tons of vermiculite ore that originated from the
Libby, Montana mine and other sources.” Id. at 8.
\bibitem{182} U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 7, at 7; see CAA Bill, supra note
108, § 216.
\bibitem{183} U.S. GEN. ACCOUNTING OFFICE, supra note 3, at 8.
\bibitem{184} Id.
\bibitem{185} Id.
\bibitem{186} EPA ACTION REPORT, supra note 14, at 18.
\end{thebibliography}
one year of receiving notification of a hazardous release, there is no indication that it performed this assessment.\textsuperscript{187} Indeed, EPA did not enter the site to investigate until 1999, following reports of “deaths or illnesses of almost 600 current or former Libby residents exposed to asbestos-contaminated vermiculite ore.”\textsuperscript{188} Although EPA denied having knowledge of the contamination prior to 1999, communications dating back to 1984 cast significant doubt on that assertion.\textsuperscript{189}

Further, in March 2001, the Inspector General of EPA recommended that EPA “examine the risks associated with asbestos-contaminated vermiculite in order to safeguard public health and the environment.”\textsuperscript{190} In response to this recommendation, EPA agreed to “develop a plan to determine the need for a national emissions standard” for asbestos-contaminated sources and ores.\textsuperscript{191} In April 2003, the Director for the Agency on National Resources and the Environment rearticulated EPA’s commitment to further research on asbestos-contaminated ore.\textsuperscript{192} At that time, EPA was in the process of “examining the need to recommend changes to laws and policies to address contaminant asbestos.”\textsuperscript{193}

EPA should now revisit the area of asbestos contaminants and consider implementing a separate NESHAP, or at least promulgating explicit regulations on contaminant asbestos.\textsuperscript{194} Alternatively, EPA should consider regulating asbestos contaminants as criteria pollutants under National Ambient Air Quality (NAAQ) standards.\textsuperscript{195} Implementing a NAAQ standard for asbestos contaminants would have permitted air testing upon EPA’s arrival in Libby.\textsuperscript{196} However, EPA has

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{187} Id.
\item \textsuperscript{188} U.S. \textsc{Gen. Accounting Office}, supra note 3, at 8.
\item \textsuperscript{189} EPA \textsc{Action Report}, supra note 14, at 16. “The Government encourages the impression that the EPA first learned of asbestos-related disease in Libby in 1999. Nothing could be further from the truth . . . . The health problems among former Grace workers and some family members were well-known and much-studied decades earlier.” Appellees’ Joint Response Brief, supra note 5, at 39.
\item \textsuperscript{190} U.S. \textsc{Gen. Accounting Office}, supra note 3, at 13.
\item \textsuperscript{191} Id.
\item \textsuperscript{192} \textit{See generally id.} (discussing a number of research initiatives taken by EPA in attempt to obtain more data on asbestos contaminants).
\item \textsuperscript{193} Id. at 12.
\item \textsuperscript{194} EPA \textsc{Action Report}, supra note 14, at 6 (recommending that EPA “reconsider regulating contaminant asbestos” because new health effects of these contaminants continue to surface).
\item \textsuperscript{195} Id. (recommending that EPA reconsider the need for regulation of asbestos in ambient air under the CAA).
\item \textsuperscript{196} Id.
\end{itemize}
\end{footnotesize}
been unable to assess air toxicity in Libby.\footnote{Toxicity Report, supra note 49, at 2; U.S. Gov’t Accountability Office, supra note 7, at 4, 26.} The agency now expects to complete this assessment by 2010.\footnote{U.S. Gov’t Accountability Office, supra note 7, at 4, 26.}

Failure to regulate in this area leaves the Libby community exposed to asbestos contaminants.\footnote{See id. at 4.} Nonetheless, the MSHA counsels against redefining asbestos to include contaminants for three reasons: (1) MSHA maintains that lowering exposure limits and educating the mining community on the “asbestos hazard in mining” is a more practical solution;\footnote{Asbestos Exposure Limit, 70 Fed. Reg. 43,952 (July 29, 2005) (to be codified at 30 C.F.R. pts. 56, 57, 71).} (2) redefining asbestos calls for broad-scale inter-agency cooperation, additional scientific research, and a delay in granting miners’ benefits;\footnote{Id.} and (3) MSHA concluded that a Libby-like mine is not likely to reemerge because of the high risks that the mine’s product would be “commercially unmarketable.”\footnote{Id.} MSHA’s arguments against regulating asbestos contaminants are not compelling.\footnote{See Brief of Appellant, supra note 5, at 7–12; Schneider, Left to Die, supra note 7, at A4.}

The MSHA’s position only contributes to the problem by aiding companies—like Grace—in their pursuit of capital, while blatantly disregarding the public welfare.\footnote{See United States v. Grace (Grace II), 455 F. Supp. 2d 1122, 1132 (D. Mont. 2006).} In light of new information revealing possible risks from other types of mining activities, future exposure does not seem far-fetched.\footnote{EPA Action Report, supra note 14, at 10. Notably, when asked about their intentions for the Libby mine, the new owners replied, “There’s a lot of ore left in that hill.” Andrew Schneider, Miners’ Search for Gold Led to Vermiculite, Seattle Post-Intelligencer, Nov. 11, 1999, at A11, available at 1999 WLNR 19996692.}

**B. Scientific Uncertainties Are an Inadequate Justification for EPA Inaction**

EPA’s primary explanation for refusing to regulate asbestos contaminants is that it lacks the requisite knowledge for drafting regulations.\footnote{EPA Action Report, supra note 14, at 18–19 (identifying “limitations of science, technology, and health effects data” as barriers to regulation of asbestos contaminants); U.S. Gov’t Accountability Office, supra note 7, at 7 (referencing EPA reports that “identified problems in sampling, analysis, and reproducibility of data regarding . . . vermiculite, which made it difficult to acquire data on exposure and health effects”).} EPA’s position rests on three unqualified assumptions: scientific
certainty is required before it can promulgate regulations; currently available data on asbestos contaminants is not sufficient for regulation; and scientific classifications trump health concerns.

1. EPA Regulations Need Not Be Based on Scientific Certainty

Courts have held that insufficient data is not a blanket excuse for failing to regulate, particularly when dealing with dangerous agents. For instance, in *Massachusetts v. EPA*, the U.S. Supreme Court recently rejected EPA’s claim that it lacked sufficient data on which to regulate greenhouse gases. The Court held that EPA cannot “avoid its statutory obligation by noting the uncertainty surrounding various features of climate change.” Rather, EPA must ask whether “sufficient information exists to make an endangerment finding.” Should such information exist, EPA must either regulate or provide a reasonable explanation for not regulating. Because EPA had not offered a “reasoned explanation” for its refusal to determine whether a causal connection existed between greenhouse gases and climate change, its refusal to regulate was deemed “arbitrary, capricious, . . . or otherwise not in accordance with law.”

EPA’s refusal to regulate asbestos contaminants is equally arbitrary and capricious. Although EPA continually asserts that it lacks sufficient information on asbestos contaminants, the Libby debacle presents more than adequate support for regulation. Based on the Supreme Court’s ruling in *Massachusetts v. EPA*, EPA has sufficient data on which to act.

2. The Known Dangers of Asbestos Justify EPA Regulation of Contaminant Asbestos

Irrespective of whether EPA is satisfied by data currently available on contaminant asbestos, the dangers of these varieties provide suffi-

208 Id. at 1463.
209 Id.
210 Id.
211 Id. at 1462.
212 Id. at 1463.
215 See Massachusetts v. EPA, 127 S. Ct. at 1444.
cient grounds for promulgating regulations. Amphiboles, tremolite, and other contaminants are retained in the lungs for longer periods of time, and are, therefore, more carcinogenic than chrysotile fibers. Further, the common dangerous features of all asbestiforms permit EPA to make judgments about what policies best safeguard public health. In making these judgments, EPA may take available data on similar substances into account.

For example, in *Environmental Defense Fund v. EPA*, the court upheld EPA regulation of “less chlorinated PCBs” over assertions that EPA lacked sufficient data. Although scientific knowledge about these substances was limited, EPA argued that the known hazards of “more chlorinated PCBs,” combined with similarities among the two groups, constituted an adequate basis for regulation. The court reasoned:

> Industry petitioners contend that EPA lacked an adequate basis for the regulations under review because of the incomplete scientific knowledge about less chlorinated PCBs. In effect, they assert that EPA must demonstrate the toxicity of each chemical it seeks to regulate through studies demonstrating a clear line of causation between a particular chemical and harm to public health or the environment. We do not agree.

Finding similar properties between the compounds, the court upheld the EPA regulations on “less chlorinated PCBs.” Similarly, the common dangerous propensities among commercial asbestos and asbestos contaminants justify extrapolating from what is known about the former to ensure that the latter does not threaten public health.

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216 See *Envtl. Def. Fund v. EPA*, 598 F.2d 62, 83 (D.C. Cir. 1978) (holding that EPA could rely on data obtained on “more chlorinated PCBs” to regulate “less chlorinated PCBs” because the two compounds share dangerous propensities).

217 *U.S. Dep’t of Health & Human Serv.*, *supra* note 10, at 10.

218 See *Envtl. Def. Fund*, 598 F.2d at 83.

219 Id.

220 Id. at 78–79. Polychlorinated biphenyls (PCBs) “are a group of [toxic] chlorinated hydrocarbon chemicals” having a variety of industrial uses. Id. at 66. PCBs are divided into two groups, “less chlorinated PCBs” and “more chlorinated PCBs.” Id. at 78. Prior to the 1970s, the latter were increasingly produced; however, public pressure led to a shift to greater reliance on “less chlorinated PCBs.” Id. at 78–79. Unfortunately, scientific knowledge on this group of PCBs is needed. Id.

221 Id.

222 Id. at 83.

223 Id. at 102.

224 See *Envtl. Def. Fund*, 598 F.2d at 102.

Contaminant-asbestos emissions are unregulated even though the resulting health risk is well established. EPA argues that difficulties related to classifying asbestos fibers create obstacles to effective regulation. Its desire for more precise scientific data has come at the expense of public welfare.

Chemical distinctions are significant from a scientific standpoint, but do not add much as regulatory terminology unless that terminology is linked to risk. Thus “regulatory decisions [should not] hinge on such details as [chemical composition]” when health risk is established. Nevertheless, chemical properties unjustifiably affect whether legislators legislate, agencies regulate, and egregious crimes are punished properly. Granting scientific data such power over regulatory decisions imposes substantial risks on public health.

C. The Trial Court Must Convict Despite EPA Inaction

The Ninth Circuit’s reversal of the district court’s preliminary rulings does not seal the defendants’ fate. The case will be tried in the Montana District Court “before the [same] Montana-based judge” that

225 See 40 C.F.R. § 61.01 (2006).
226 See EPA Action Report, supra note 14, at i (attribution lack of a contaminant-asbestos NESHAP to “limitations of science, technology, and health effects data”).
227 See Ann G. Wylie & Jennifer R. Verkouteren, Amphibole Asbestos from Libby, Montana: Aspects of Nomenclature, 85 Am. Mineralogist 1329, 1542 (2000). For an in-depth analysis of asbestos and its multiple mineral compositions, see the proposed rule offered by MSHA in 2005. Mine Safety Health Administration (MSHA), Labor, 70 Fed. Reg. 43,950, 43,952–53 (proposed July 29, 2005) (discussing the difficulty of classifying asbestos minerals when “mineral names are not applied in a uniform manner and are not all consistent with presently accepted mineralogical nomenclature and definitions”). The proposed rule also notes that minerals can transition into different series of asbestos variations, making classification even more difficult, if not impossible. Id. at 43,953.
228 Wylie & Verkouteren, supra note 228, at 1542.
229 Id.
230 See Env’tl. Def. Fund v. EPA, 598 F.2d 62, 79 (D.C. Cir. 1978) (“[S]cientific knowledge about the effects of chemicals cannot keep up with the ability of industrial laboratories to create new ones.”); United States v. Grace (Grace II), 455 F. Supp. 2d 1122, 1132–33 (D. Mont. 2006) (excluding the government’s evidence because science was incapable of distinguishing among the asbestiforms found at the Libby site). See generally Reserve Mining Co. v. United States, 514 F.2d 492 (8th Cir. 1975) (concluding that insufficient scientific data on dangers of taconite tailings counseled against closing the plant).
231 See Wylie & Verkouteren, supra note 228, at 1542.
232 Schneider, Asbestos Prosecution, supra note 161, at A7.
issued the preliminary rulings in *United State v. Grace (Grace II).*\(^{233}\) Although evidence previously excluded must be admitted, the trial judge retains significant control.\(^{234}\) Therefore, the burden of achieving an outcome consistent with the CAA lies with the jury.\(^{235}\)

Congress enacted the CAA to create a regime through which air pollution giving rise to public health risks could be reduced or eliminated.\(^{236}\) Therefore, the CAA, the asbestos NESHAP, and the criminal provisions of the CAA should be interpreted in light of these goals.\(^{237}\) If these goals take precedence at trial, the following conclusions are inevitable: the CAA is a public welfare statute lacking any requirement that defendants know they are violating a law,\(^{238}\) and the evidence establishes that the defendants intentionally released asbestos knowing that their actions placed others in imminent danger of bodily harm and even death.\(^{239}\)

1. Defendants Need Not Know Their Conduct Violates the CAA

Establishing intent, knowledge, and causation in environmental criminal matters often poses considerable difficulty.\(^{240}\) Congress recognized these barriers and drafted solutions into the criminal provisions

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\(^{233}\) Id.

\(^{234}\) Id.; see *Grace II*, 455 F. Supp. 2d at 1132–33 (excluding the government’s sampling evidence).

\(^{235}\) See generally 42 U.S.C. §§ 7401, 7412–7413 (2000) (noting that Congress intended for the act to promote public health and welfare and to criminally prosecute any person—including a corporate entity—that knowingly released an air pollutant and placed another in imminent danger of death or bodily injury).

\(^{236}\) See id. § 7401(b) (1)–(4). The statute states:

The purposes of this subchapter are—

1. to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population;

2. to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution;

3. to provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs; and

4. to encourage and assist the development and operation of regional air pollution prevention and control programs.

\(^{237}\) See *United States v. Dotterweich*, 320 U.S. 277, 280–82 (1943) (illustrating that the congressionally intended purpose of the statute was relevant at all stages of analysis).

\(^{238}\) *United States v. Grace (Grace I)*, 429 F. Supp. 2d 1207, 1228 (D. Mont. 2006).

\(^{239}\) See Brief of Appellant, *supra* note 5, at 31–32.

of all environmental statutes.\textsuperscript{241} Inherent in these statutes is an understanding that the brunt of the hardship should be on those with the opportunity to prevent the harm.\textsuperscript{242} Therefore, in cases arising under these statutes, prosecutors need only prove that the defendants acted knowingly.\textsuperscript{243}

For instance, in \textit{United States v. Dotterweich}, the Supreme Court upheld a corporate officer’s conviction for acts in violation of the Federal Food, Drug, and Cosmetic Act.\textsuperscript{244} The Act forbade the transport of adulterated goods within commerce.\textsuperscript{245} The Court’s recognition of the Act as a public welfare statute guided its analysis.\textsuperscript{246} The Court dispensed of the “conventional requirement[s] for criminal conduct,” namely, “awareness of . . . wrong doing.”\textsuperscript{247} Additionally, the Court did not find the statute unconstitutionally vague for omitting an exhaustive list of employees covered.\textsuperscript{248} The Court recognized Congress’s intent to place “relative hardships” on those with the ability to prevent the harm rather than on the innocent public.\textsuperscript{249} Similarly, in \textit{United States v. MacDonald \& Watson Waste Oil Co.}, the court upheld the defendants’ conviction over protests of statutory ambiguity because failure to do so would have “significantly weaken[ed] . . . protection against the danger that most concerned Congress.”\textsuperscript{250}

\textit{Dotterweich} and \textit{MacDonald \& Watson Waste Oil Co.} support finding that the Grace defendants acted in violation of the knowing endan-

\textsuperscript{241} See id.
\textsuperscript{242} \textit{Dotterweich}, 320 U.S. at 281, 285 (noting the importance of placing the burden of adulterated shipments on shippers to “identify their wares”).
\textsuperscript{243} \textit{Grace I}, 429 F. Supp. 2d at 1228. “Public welfare statutes are not to be construed narrowly but rather to effectuate the regulatory purpose.” United States v. MacDonald \& Watson Waste Oil Co., 933 F.2d 35, 47, 49–50 (1st Cir. 1991).
\textsuperscript{244} \textit{Dotterweich}, 320 U.S. at 281.
\textsuperscript{245} Id. at 278.
\textsuperscript{246} See id. at 280 (noting that the clause could “not be read in isolation” from its purpose “to keep impure and adulterated food and drugs out of the channels of commerce”).
\textsuperscript{247} Id. at 281.
\textsuperscript{248} Id. at 285. “To attempt a formula embracing the variety of conduct whereby persons may responsibly contribute in furtherance of a transaction forbidden by [the] Act” would be an exercise in futility. Id. “In such matters, the good sense of prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries must be trusted.” Id.
\textsuperscript{249} Id. at 285.
\textsuperscript{250} United States v. MacDonald \& Watson Waste Oil Co., 933 F.2d 35, 47 (1st Cir. 1991). In \textit{Watson Waste Oil Co.}, the defendants contended that their actions fell beyond the pur-view of the Resource Conservation and Recovery Act (RCRA) because the facility was not entirely without a RCRA hazardous waste permit. Id. at 48. The court, in contrast, noted that the statute was violated when transportation of hazardous waste does not comply with RCRA permit conditions. Id. at 49.
Defendants’ guilt is not contingent on their awareness of § 7413(c)(5). Thus, their constitutional rights are not violated by admitting evidence of asbestos particles that are unlisted in CAA. Such a requirement improperly implies that knowledge of the statute is an element of the knowing endangerment claim.

Further, this case—distinguishable from Adamo Wrecking Co. v. United States—does not implicate defendants’ due process rights. Defendant Adamo was indicted under § 7412(c)(1)(b) of the CAA. The Supreme Court’s analysis focused on whether the provision constituted an emissions standard or a “technique to be utilized in achieving” emissions standards. After examining the regulatory scheme in its totality, the Court held that the regulation was not an emissions standard, and found it doubtful that Congress intended for violators to face criminal liability. This doubt led the Court to invoke the principle of lenity. Unlike the defendant in Adamo, Grace and its officials are not facing penalties under a demolition standard or work practice standard, or a regulation that is inconclusive as to whether criminal penalties should attach. In contrast, the knowing release of asbestos that places an-
other in imminent danger of death or bodily harm is precisely the conduct that Congress intended to criminalize in the CAA.\footnote{See 42 U.S.C. § 7413(c)(5). Further, in United States v. Borowski, the court invoked the lenity principle in applying the Clean Water Act because the defendants’ conduct was not at odds with the Act’s purpose. 977 F.2d 27, 30 (1st Cir. 1992). The court found that, although the defendants knowingly endangered employees, the Act aimed to prevent discharges into publicly owned treatment works. Id. at 31–32. Unlike in Borowski, knowingly endangering employees cannot be distinguished from knowingly endangering the public when dealing with an airborne hazardous substance. See id.}

2. The Evidence Supports Conviction Under § 7413(c)(5)

The knowing endangerment offense requires proving that the defendant knowingly placed another in imminent danger of death or serious harm by intentionally releasing a HAP, or extremely hazardous substance.\footnote{See 42 U.S.C. § 7413(c)(5); Mandiberg & Smith, supra note 61, at 132.} The record supports the conclusion that Grace knew the effects of its vermiculite-mining activity.\footnote{See Brief of Appellant, supra note 5, at 7.} For instance, tests conducted by Grace placed the company on notice that its mining activity emitted asbestos, that its products emitted asbestos, and that its employees were increasingly prone to cancer-related abnormalities.\footnote{Id. at 7–8.} Further, the defendants had “specialized knowledge” of industrial chemicals, and expertise in dealing with the relevant regulations, including the Chemical Abstracts Service (CAS) Registry, a database of chemical information.\footnote{United States v. Grace (Grace III), 504 F.3d 745, 755 n.3 (9th Cir. 2007); Brief of Appellant, supra note 5, at 31. Notably, the defendants never dispute their specialized knowledge; rather, they assert that having specialized knowledge supports their position. See Appellees’ Joint Response Brief, supra note 5, at 41–42 (“[A]ssuming such knowledge, the more one knows about the regulatory framework for asbestos under the Clean Air Act and . . . the CAS Registry, the less likely one would be to conclude that the reference to ‘asbestos’ in § 7412(b)(1) includes winchite and richterite.”).} According to the government’s appellate brief, Grace, and the experts the company retained, consistently referred to the Libby asbestos as tremolite.\footnote{Appellees Joint Response Brief, supra note 5, at 42.} Therefore, Grace’s specialized knowledge distinguishes it from the common person reading a NESHAP and casts doubt on any due process concerns raised by the district court and the defense.\footnote{Id. The court noted that a defendant’s due process rights are violated when the court “appl[ies] a novel construction of a criminal statute to conduct that neither the statute nor any prior judicial decision has fairly disclosed to be within its scope.” Id. However, “whether some hypothetical person might find it difficult to determine what substances fall within the CAS Registry’s definition of asbestos, it is clear that the defendants were not in such a position.” Id. at 31–32.} In light of the defendants’ knowledge, continuous operation of the mine
violated the knowing endangerment provision and criminal penalties should be imposed.\textsuperscript{268} Much more is at stake than justice for Libby residents if an acquittal of these defendants becomes precedent for future cases.\textsuperscript{269}

**Conclusion**

Without a doubt, responsibility for the Libby debacle should fall on two bad actors: EPA for abdicating its regulatory duties and the Grace defendants for knowingly releasing asbestos with knowledge of the resulting threat to human life.\textsuperscript{270} EPA inaction with regard to contaminant asbestos in Libby is inexcusable. However, the defendants’ actions are, at least, as appalling. Therefore, while an acquittal might humiliate EPA into regulatory efforts, it would also obstruct the goals of environmental criminal law and leave the Libby community without an appropriate remedy.

Perhaps EPA will issue regulations in the near future. If, however, the it does not, courts must not hesitate to hold defendants accountable under § 7413(c)(5). Doing so—contrary to defendants’ argument—does not blur the line between what does and does not constitute a “knowing endangerment” violation.\textsuperscript{271} Penalizing Grace defendants, and similarly situated violators under § 7413(c)(5), does not run contrary to any principle of justice.\textsuperscript{272} The defendants knew that their actions were causing deaths, yet they attempted to conceal the truth and people continued to die.\textsuperscript{273} At this very moment, someone in Libby may be experiencing the initial symptoms of an asbestos-related disease due to the latency period following exposure.\textsuperscript{274} A guilty verdict will not be

\textsuperscript{268} 42 U.S.C. § 7413(c)(5) (2000); Brief of Appellant, supra note 5, at 7–9.

\textsuperscript{269} See Schneider, Asbestos Prosecution, supra note 161, at A7.

\textsuperscript{270} The parties are quite effective in shifting blame to the other side. See, e.g., Appellee’s Joint Response Brief, supra note 5, at 8–9 (suggesting the defendants are simply scapegoats for EPA failure). “The 1999 newspaper articles in effect accused the EPA of failing to follow up on such information. . . . Whether or not such accusations were justified, this criminal prosecution provides the Government a convenient excuse—a conspiracy among the defendants—for the Government’s own perceived failure to act in Libby.” Id.

\textsuperscript{271} See Appellees’ Joint Response Brief, supra note 5, at 2.

\textsuperscript{272} See 42 U.S.C. § 7413(c)(5); Brief of Appellant, supra note 5, at 29–30.

\textsuperscript{273} See Brief of Appellant, supra note 5, at 10–11; Schneider, Left to Die, supra note 7, at A4.

\textsuperscript{274} See Brief of Appellant, supra note 5, at 10. “[M]ore victims are expected to be discovered in the years to come due to the long delay that frequently occurs between exposure and the manifestation of symptoms.” Id. In fact, since initiating its case, the government has lost several key witnesses to deaths caused by asbestos-related disease, including one of the defendants. Schneider, Asbestos Prosecution, supra note 161, at A7.
the result of “intense passions and political pressures.” To the contrary, holding the Grace defendants criminally responsible will give § 7413(c)(5) its congressionally intended effect.

275 See Appellees’ Joint Response Brief, supra note 5, at 2.
A FRAMEWORK FOR ALTERNATIVE ENERGY DEVELOPMENT: SHIFTING FROM DRILLING RIGS TO RENEWABLES

Timothy Holahan*

Abstract: In the age of $100-a-barrel oil and global warming, the development of sources of alternative energy is a critical component of political and popular discourse. Recently, the Energy Policy Act of 2005 increased funding and tax credits for clean alternative energy. Several projects involving industry and local regulators have been progressing through the planning and development stages. Yet, despite the favorable political and regulatory climate surrounding alternative energy projects, such projects continue to encounter resistance because of projected costs and local “not in my backyard” (NIMBY) concerns. One program which would minimize costs and NIMBY-type reactions is “Rigs to Renewables,” which would place renewable energy stations on obsolete offshore oil rigs. In order to establish an adequate legal and regulatory framework for this program, its creators should incorporate the strengths of the existing “Rigs to Reefs” program, while improving on its weaknesses.

Introduction

As concerns about traditional sources of energy have grown, government, industry, and media have paid increasing attention to the development of potential alternative energy sources. The Energy Policy Act of 2005 increased funding for clean alternative energy by twenty-two percent and included tax credits and additional incentives for alternative energy development. Several major alternative energy projects are in the planning and permitting stages. Unfortunately,

* Articles Editor, Boston College Environmental Affairs Law Review, 2007–08.


2 Energy Policy Act of 2005, 42 U.S.C.A. § 2102 (2005); U.S. Dep’t of Energy, supra note 1, at 1, 4. Among the Energy Policy Act’s incentives is an extension of federal tax credits for the development of solar, wind, and biomass energy sources. Id. at 4. The Act also streamlines the licensing procedure for hydroelectric plants. Id.

many of these projects have encountered resistance in the project sitting stage.\textsuperscript{4} Local governments, interest groups, and ordinary citizens often recognize the potential benefits of the projects, but dispute the choice of the site closest to them.\textsuperscript{5} Such local opposition has been referred to pejoratively as “not in my backyard” (NIMBY) syndrome because these groups oppose the projects despite the potential benefits simply because of the projects’ proximity to their residences.\textsuperscript{6}

Given such local opposition, it would be beneficial to renewable energy development to implement projects that minimize potential objections on sitting grounds.\textsuperscript{7} One such project, proposed by the Ocean Renewable Energy Coalition (OREC), would use old offshore oil rigs as renewable energy stations.\textsuperscript{8} The rigs would form the platform on which structures that harness renewable energy would be placed.\textsuperscript{9} Tentatively called “Rigs to Renewables,” the project would adequately address most NIMBY concerns because oil rigs are located miles offshore.\textsuperscript{10}

Rigs to Renewables would also have the advantage of creating a use for rigs that the oil industry otherwise would be required to disassemble, at great cost both to industry and to the environment.\textsuperscript{11} This element of
the program would provide incentives for the participation of the oil industry, which traditionally has been opposed to renewable energy projects. Furthermore, Rigs to Renewables would minimize NIMBY opposition, while taking advantage of the favorable political and regulatory climate regarding renewable energy development.

In addition to its compelling political and economic incentives, Rigs to Renewables would require a proper regulatory and legal framework to operate effectively. This framework must allow Rigs to Renewables to achieve its policy objectives, while addressing legal issues that will inevitably arise in a program that involves extensive cooperation between government and industry. Because the government will play an active role in the placement and development of rigs in government waters, federal legislation and regulation likely will form the backbone of this framework. The program must delineate what government agencies have jurisdiction, and should describe procedures for site selection, permitting, and construction of renewable energy stations. Moreover, because Rigs to Renewables involves the use of private industry assets—oil rigs—for the public good, the framework must also define the role of private parties in the program, including the extent of private legal liability if an accident occurs on a rig during the implementation of the program.

There are two potential options in addressing the issues that will arise in the development of Rigs to Renewables. The first option is to


12 See Dauterive, supra note 11, at iv; see, e.g., Jon Birger Skjaerseth & Tora Skodvin, Climate Change and the Oil Industry: Common Problems, Different Strategies, GLOBAL ENVT'L. POL., Nov. 2001, at 43, 44 (discussing American oil companies’ opposition to the Kyoto Protocol and reluctance to support renewable energy technology).

13 See Geoghegan, supra note 8, at 34; U.S. Dep’t of Energy, supra note 1, at 1.


15 See Dauterive, supra note 11, at 1, 5; Reef Plan Revision, supra note 14, at 28.


17 See Reef Plan Revision, supra note 14, at 1, 4.

18 See 33 U.S.C. § 2104(c); Reef Plan Revision, supra note 14, at 14, 45–47.
create an entirely new legal and regulatory framework.\(^{19}\) The second option is to model Rigs to Renewables after an existing program with similar goals and methods, such as the Rigs to Reefs program, which was established in 1984.\(^{20}\) Incorporating aspects of the legal and regulatory framework of Rigs to Reefs into Rigs to Renewables would not only be more efficient than creating entirely new guidelines, but would also ensure that the successful aspects of Rigs to Reefs are incorporated effectively into Rigs to Renewables.\(^{21}\)

Part I of this Note provides an overview of the Rigs to Reefs program. Because offshore oil rigs are the key resource in Rigs to Reefs, this part focuses on how rigs function, how the program uses them, and how decommissioning regulations govern the transition from rig to reef. Part II explains Rigs to Reefs’ regulatory structure: federal enabling legislation established the program, a national plan describes the program’s basic characteristics, and state plans provide the details necessary for the program’s implementation.\(^{22}\) Part III explains how Rigs to Renewables should incorporate the hierarchal structure that is the strength of Rigs to Reefs, while avoiding the inflexibility that limits the program’s effectiveness.

I. Description of the Rigs to Reefs Program

Every offshore oil rig has the same basic structure and function.\(^{23}\) Oil is extracted through holes dug in the ocean floor known as wells.\(^{24}\) The drill that creates the holes is the rig.\(^{25}\) The structure that sits atop the well and extracts the oil is the platform.\(^{26}\) The term rig is commonly used to refer to what is actually the platform—thus, the

\(^{19}\) See Reef Plan Revision, supra note 14, at 1.

\(^{20}\) See 33 U.S.C. §§ 2101–2106; Reef Plan Revision, supra note 14, at 1. The NFEA’s purpose is “to promote and facilitate responsible and effective efforts to establish artificial reefs in waters covered under this chapter.” 33 U.S.C. § 2101(b). The National Artificial Reef Plan describes the purpose of Rigs to Reefs as an effort to preserve and enhance fisheries for commercial and recreational use by using obsolete oil rigs as breeding ground for marine life. Reef Plan Revision, supra note 14, at 1.


\(^{23}\) Mark J. Kaiser & Allan G. Pulsipher, Rigs-to-Reef Programs in the Gulf of Mexico, 36 Ocean Dev. & Int’l L. 119, 119–21 (2005). There is some variation in the rig structure, but all structures consist of the same three elements: the rig itself—the drilling equipment—the platform supporting the rig, and the jacket supporting the platform. Id. at 121.

\(^{24}\) See id. at 121, 124.

\(^{25}\) See id. at 121.

\(^{26}\) See id.
name Rigs to Reefs refers to converting oil platforms to reefs.\textsuperscript{27} It is these platforms that form the supporting structures for fish habitats.\textsuperscript{28}

Under the Rigs to Reefs program, private rig owners donate rigs to state governments, which then convert the rigs to artificial reefs.\textsuperscript{29} Rigs to Reefs developed from a joint initiative of two federal agencies—the Minerals Management Service (MMS) and the National Marine Fisheries Service (NMFS).\textsuperscript{30} At the time that these two agencies started the program, a significant number of oil rigs in the Gulf of Mexico had recently stopped producing oil.\textsuperscript{31} The MMS regulations required that the oil companies that owned the rigs disassemble them and remove them from the water.\textsuperscript{32} Left in the water, the rigs were a potential hazard to ship navigation and to the environment.\textsuperscript{33} However, removing the rigs was costly for industry.\textsuperscript{34} Rigs to Reefs created a means for industry to avoid much of the cost of decommissioning by leaving the rigs intact in the water.\textsuperscript{35}

Not only was Rigs to Reefs advantageous for industry, but the program would benefit environmentalists, as well as commercial and rec-

\textsuperscript{27} See id.
\textsuperscript{28} Id. at 120.
\textsuperscript{29} Kaiser & Pulsipher, supra note 24, at 119; Dauterive, supra note 11, at iv.
\textsuperscript{30} Dauterive, supra note 11, at 1. The MMS is a department of the U.S. Department of the Interior. Id. The NMFS is a department of the U.S. Department of Commerce. Reef Plan Revision, supra note 14, at 6–7.
\textsuperscript{31} Kaiser & Pulsipher, supra note 23, at 119, 120 fig.1. For example, as late as 1986, approximately twenty oil structures were removed from the Gulf of Mexico for lack of production; by 2003, over 140 structures were removed from the Gulf of Mexico for lack of production. Id. at 120 fig.1.
\textsuperscript{32} Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Decommissioning Activities, 30 C.F.R. § 250.1703 (2007) (describing general requirements for decommissioning). The MMS refers to the process of disassembling a rig and removing it from the water as decommissioning the rig. Id. The MMS has jurisdiction over offshore oil extraction. Outer Continental Shelf Management Act, 43 U.S.C. §§ 1331(b), 1334(a) (2000). The MMS is responsible for leasing the rights to mineral exploration and extraction on federally owned land, and for regulating the operation of the facilities used in the exploration and extraction process. Id. §§ 1331(a), 1334(a).
\textsuperscript{33} See 30 C.F.R. § 250.1700(b); Kaiser & Pulsipher, supra note 23, at 124.
\textsuperscript{34} Decommissioning Costs, supra note 11, at ii & tbl.1. The cost to industry of decommissioning varies depending on the particular site and facilities involved. Id. at i. One MMS report estimated decommissioning costs of individual platforms in the Pacific outer continental shelf. Id. at ii. The least expensive platform cost approximately $10 million to decommission, the most expensive platform cost $129 million, and the average cost of decommissioning a platform was approximately $43 million. See id. at ii tbl.1.
\textsuperscript{35} See Dauterive, supra note 11, at iv. That is not to say that the oil industry may avoid all costs associated with decommissioning. See, e.g., 30 C.F.R. § 250.1710. Rig owners that donate a rig to Rigs to Reefs must still ensure that the rig has been properly cleaned and plugged to prevent any remaining oil from leaking into the surrounding environment. Id.
reational fishermen.\textsuperscript{36} Oil rigs provide ideal habitats for many species of fish and other marine life.\textsuperscript{37} Using oil rigs as breeding grounds for marine life would serve conservation interests by providing additional habitats for many species, while providing additional sources of fish for commercial and recreational fishermen.\textsuperscript{38}

Not all interested parties agreed that Rigs to Reefs was a good idea.\textsuperscript{39} Indeed, some environmentalists claimed that leaving rigs in the water in any form was detrimental to the surrounding environment.\textsuperscript{40} The MMS attempted to address this concern by requiring that rigs donated to Rigs to Reefs comply with the basic environmental requirements of the decommissioning regulations.\textsuperscript{41} The MMS designed its decommissioning regulations to minimize the environmental impact of obsolete rigs to the greatest extent possible.\textsuperscript{42}

Under Rigs to Reefs, basic decommissioning requirements still apply; however, the MMS exempts rig owners from the more onerous decommissioning regulations.\textsuperscript{43} The MMS requires rig owners to undertake three principal steps under Rigs to Reefs, each of which requires them to address the potential environmental impact of decommissioning.\textsuperscript{44} First, rig owners must get approval from the appropriate the MMS supervisor before decommissioning a rig or the facilities support-

\textsuperscript{36} Reef Plan Revision, \textit{supra} note 14, at 2–3.
\textsuperscript{37} MMS, Artificial Reefs: Oases for Marine Life in the Gulf, \url{http://www.gomr.mms.gov/homepg/regulate/environ/rigs-to-reefs/artificial-reefs.html} (last visited Mar. 31, 2008). Oil rigs are a particularly ideal habitat in the Gulf of Mexico, which has a flat, sandy bottom generally not suitable as a habitat for most types of marine life. \textit{Id.} The oil platforms provide points around which marine life can congregate and grow. \textit{Id.}
\textsuperscript{38} Reef Plan Revision, \textit{supra} note 14, at 2–3. For example, one study estimated that seventy percent of Louisiana fishing expeditions target oil platforms converted into artificial reefs, which is a testament to the effectiveness of oil platforms as breeding grounds for marine life. See Donna M. Schroeder & Milton S. Love, \textit{Ecological and Political Issues Surrounding Decommissioning of Offshore Oil Facilities in the Southern California Bight}, \textit{47 Ocean & Coastal Mgmt.} 21, 21–30 (2004).
\textsuperscript{39} Schroeder & Love, \textit{supra} note 38, at 30. Some community groups opposed Rigs to Reefs simply because the oil companies seemed to reap excessive benefits from the program. \textit{Id.} For example, a representative from one group opposed to Rigs to Reefs in California stated, “We’re not convinced that the alleged scientific benefit to habitat is worth the sort of larger social encouragement it gives the oil companies.” \textit{Id.}
\textsuperscript{40} \textit{Id.} at 30–31.
\textsuperscript{41} Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Decommissioning Activities, 30 C.F.R. § 250.1703(f) (2007).
\textsuperscript{42} See \textit{id.} § 250.1703(c)–(f).
\textsuperscript{43} Schroeder & Love, \textit{supra} note 39, at 24–25. For example, rig owners donating to Rigs to Reefs may not be required to remove main components of the rig, such as the platform, or to clear the leased area of all obstructions. \textit{Id.} at 24.
\textsuperscript{44} 30 C.F.R. § 250.1703.
ing a rig.\textsuperscript{45} Owners must submit applications that require them to make plans to protect archaeological and sensitive biological features of the environment during the decommissioning process.\textsuperscript{46} Second, rig owners must either seal or remove supporting components of the rig apparatus that are not necessary to the rig’s function as an artificial reef.\textsuperscript{47} Such supporting components generally include wells and pipelines.\textsuperscript{48} Third, rig owners must submit final reports describing the rig’s potential future environmental impacts and the mitigation measures that the owners took to minimize such impacts.\textsuperscript{49} For example, owners must verify that the rig site has been cleared of unnecessary obstructions and has not unnecessarily disturbed the surrounding sea floor.\textsuperscript{50}

By exempting rig owners from the costliest decommissioning requirements, while enforcing those requirements related to environmental impacts, the MMS encourages industry participation and helps preserve the ocean environment.\textsuperscript{51} The National Fishing Enhancement Act (NFEA), the federal legislation authorizing Rigs to Reefs, similarly encourages these goals.\textsuperscript{52}

\textsuperscript{45} Id. § 250.1703(a). The MMS defines “facility” as “any installation other than a pipeline . . . that is permanently or temporarily attached to the seabed on the [Outer Continental Shelf].” Id. § 250.1700(c).

\textsuperscript{46} Id. § 250.1712(f)(14).

\textsuperscript{47} Id. § 250.1703(b), (c).

\textsuperscript{48} Id. Decommissioning a well requires \textit{plugging} or sealing it to prevent underground materials from leaking up through the well and polluting the surrounding environment. \textit{Id.} §§ 250.1703(b), 250.1714. Decommissioning a pipeline entails either removing it or sealing it off by flushing the pipeline of potential pollutants, filling it with seawater, cutting and plugging each end of the pipeline, and covering or burying both ends. \textit{Id.} § 250.1751(c)–(f). Removing the components also ensures that they will not obstruct the sea floor and pose a hazard to ship navigation and marine life. \textit{See} Schroeder & Love, \textit{supra} note 38, at 25.

\textsuperscript{49} Schroeder & Love, \textit{supra} note 38, at 25. These reports are required pursuant to the National Environmental Protection Act and corresponding state environmental reporting acts. \textit{Id.}

\textsuperscript{50} \textit{Id.} at 25–26. The MMS defines “obstructions” as “structures, equipment, or objects that were used in oil, gas, or sulfur operations or marine growth that, if left in place, would hinder other users of the [Outer Continental Shelf].” 30 C.F.R. § 250.1700(b). Obstructions may include wellheads, platforms, pipelines, and other facilities. \textit{Id.}

\textsuperscript{51} \textit{See} Dauterive, \textit{supra} note 11, at iv.

II. THE REGULATORY STRUCTURE OF RIGS TO REEFs

A. Federal Enabling Legislation and Implementation: The NFEA and the National Artificial Reef Plan

Congress enacted the NFEA in 1984. The statute’s purpose was to encourage artificial reef development in general. The legislation does not refer to Rigs to Reefs by name, but is essential to Rigs to Reefs because it provides federal agencies with both the authority to create Rigs to Reefs and the basic guidelines to implement the program. The NFEA features two basic categories of guidelines, each dealing with a legal and regulatory issue critical to the successful development of artificial reefs. The NFEA’s first category of guidelines allocates responsibility for the development of artificial reefs among federal agencies, and requires those agencies to work together to develop a plan to achieve the NFEA’s goals. The NFEA’s second category of guidelines establishes basic strictures governing the legal liability of parties involved in artificial reef development.

The NFEA allocates primary responsibility for artificial reef development among three federal agencies. The MMS is responsible for the implementation and enforcement of rig decommissioning regulations. The U.S. Army Corps of Engineers (ACE) issues the permits that allow for the planning and construction of artificial reefs. The NMFS serves as the lead agency in the development a long-term plan (National Plan or Plan) to achieve the NFEA’s goal of encouraging artificial reef development.

53 Id. § 2101; see Kaiser & Pulsipher, supra note 24, at 120.
54 See 33 U.S.C. § 2101(b).
55 See id. §§ 2102–2103.
56 See id. §§ 2103–2104.
57 Id. § 2103.
58 Id. § 2104(c), (d); see discussion infra Part II.C (discussing liability in Rigs to Reefs in additional detail).
59 33 U.S.C. §§ 2103–2104(a). Other federal agencies play an ancillary role in artificial reef development. See id. § 2103. For example, the U.S. Coast Guard has the responsibility to establish safety zones around offshore facilities, such as rigs, and to enforce fishery laws. REEF PLAN REVISION, supra note 14, at 10–11. Additionally, the Environmental Protection Agency is responsible for permitting the transportation for dumping of certain materials in ocean waters, and such permitting criteria may apply to certain artificial reef materials placed on the ocean floor. Id.
60 REEF PLAN REVISION, supra note 14, at 5.
61 33 U.S.C. § 2104(a). The ACE is headed by the Secretary of the Army. Id.
62 REEF PLAN REVISION, supra note 14, at 6. The NMFS is a division of the U.S. Commerce Department. Id. at 5–6.
The National Plan is important because it explicitly establishes Rigs to Reefs and provides many of the detailed guidelines necessary to implement the program.\textsuperscript{63} These guidelines are directed at federal agencies, which form the foundation of Rigs to Reefs, and at state agencies, which are responsible for much of the implementation of the program.\textsuperscript{64} The National Plan contains two important sections.\textsuperscript{65} The first section describes in detail the roles of the federal agencies implicated by the NFEA, namely the MMS, the NMFS, and the ACE.\textsuperscript{66} The Plan limits MMS approval of rigs for use in Rigs to Reefs to those rigs designated for such use by a state artificial reef program.\textsuperscript{67} It also describes the NMFS’s role in drafting the Plan and coordinating its implementation among the federal agencies.\textsuperscript{68} Additionally, the Plan refers to specific regulations relating to artificial reef permitting that have been promulgated by the ACE since the enactment of the NFEA.\textsuperscript{69} The second section of the Plan provides detailed guidelines for each stage of artificial reef development.\textsuperscript{70} This section includes criteria related to reef siting, materials and design, construction, and management.\textsuperscript{71} The NFEA requires these criteria for artificial reef development to be present in the Plan.\textsuperscript{72}

These two sections of the National Plan provide clear roles and tasks for the federal agencies involved in the program.\textsuperscript{73} However, federal agencies only provide the foundation for NFEA enforcement.\textsuperscript{74} The Plan states that “[t]he Federal role is to provide technical

\begin{footnotes}
\textsuperscript{63} Id. at 1. The NMFS issued the National Artificial Reef Plan in 1985, and has overseen the revision. Id. at \textit{v}. The Plan was intended to provide additional details to supplement the NFEA’s general guidelines. \textit{Id}. at 1; \textit{see} 33 \textsc{u.s.c.} \textsection 2103. State plans provide another layer of detail critical to implementation of the national plan. \textit{See} discussion \textit{infra} Part \textit{II.B.}

\textsuperscript{64} \textit{Reef Plan Revision, supra} note 14, at 4, 11–13.

\textsuperscript{65} \textit{See id.}

\textsuperscript{66} \textit{Id}. at 5–11.

\textsuperscript{67} \textit{Id}. at 5.

\textsuperscript{68} \textit{Id}. at 6–7.

\textsuperscript{69} \textit{Id}. at 9. For the purposes of this Note, the details of each agency’s role in Rigs to Reefs are less important than the general division of power among the agencies. For example, it is sufficient to understand that the ACE is responsible for permitting artificial reefs without delving into details of the ACE’s permitting regulations pertaining to artificial reefs. \textit{See} 33 \textsc{c.f.r.} \textsection\textsection 320–30 (2007).

\textsuperscript{70} \textit{See Reef Plan Revision, supra} note 14, at 15.

\textsuperscript{71} \textit{Id.}

\textsuperscript{72} \textit{See National Fishing Enhancement Act of 1984, 33 \textsc{u.s.c.} \textsection 2103 (2000)}.

\textsuperscript{73} \textit{Reef Plan Revision, supra} note 14, at 1, 4. Another section of the Plan, describing aspects of artificial reef development that require further scientific research, is not relevant to this Note. \textit{See id.} at 48.

\textsuperscript{74} \textit{Id}. at 1, 11.
\end{footnotes}
assistance, guidance, permitting and regulations for the proper use of artificial reefs.” 75 The federal agencies provide assistance and guidance primarily to state agencies, which are responsible for the bulk of the implementation of Rigs to Reefs. 76 Not only is this clear enumeration of federal agency roles advantageous for the agencies themselves, it is also beneficial for the state actors who must work extensively with the federal agencies to implement the program. 77

B. Role of the States Under the National Artificial Reef Plan

Under the National Plan, the success of Rigs to Reefs is contingent upon state agencies performing two tasks. 78 First, the Plan strongly encourages states to adopt their own artificial reef plans. 79 Second, the Plan suggests that states act as the holders of the artificial reef permits granted by the federal agencies. 80 State artificial reef plans effectively serve as more detailed, site-specific versions of the National Plan. 81 The National Plan indicates that state plans should direct state agencies to “assume[] the lead in acquiring permits, . . . financing, constructing, researching, and monitoring marine artificial reefs” using state programs. 82

Furthermore, the National Plan recommends that states restrict eligibility to hold federal artificial reef permits to the states’ own fishery management agencies. 83 The National Plan gives two reasons for this restriction. 84 For one, a state’s natural resource agencies hold the public trust in managing the state’s resources related to artificial reefs. 85

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75 Id. at 4.
76 Id. at 11 (“Since the implementation of the original Plan in 1985, most state marine fisheries agencies have assumed the lead in acquiring permits . . . through state supported programs.”).
77 See id. By providing relatively clear guidelines regarding the role of each federal agency, the Plan relieves state actors from devoting time and energy to navigating federal bureaucracies. See id.
78 See id.
79 Reef Plan Revision, supra note 14, at 11.
80 Id.
81 See id. at 1.
82 Id. at 11–12 (“A state program for artificial reef construction is an integral part of any comprehensive state/federal effort to protect, restore or enhance habitats essential to valuable commercial and recreational fisheries.”).
83 Id. at 12 (“Because of the potential long-term effects of artificial reef development on the environment and on finfish and shellfish stocks, eligibility to hold a permit to develop an artificial reef . . . should be restricted to the appropriate state fishery management agency.”).
84 See id.
85 Reef Plan Revision, supra note 14, at 12.
The agencies’ role as public trustees ensures that artificial reefs will be managed with the best interests of the public in mind. Moreover, state agencies are in the best position to assume the long-term liability necessary to hold an artificial reef permit.

Many coastal states have implemented their own artificial reef plans according to the National Plan’s directives. For example, the State of Louisiana’s plan includes instructions to state agencies to manage rig-to-reef conversions off the Louisiana coast, as well as provisions that allow state agencies to act as federal permit holders. Louisiana has made extensive use of Rigs to Reefs because of the prevalence of suitable rigs off of the state’s coast. Thus, the Louisiana Artificial Reef Plan serves as a model for state implementation of Rigs to Reefs.

Louisiana created its artificial reef plan in much the same manner as the NFEA created the National Plan. The Louisiana state legislature enacted enabling legislation that delegated the task of creating a state artificial reef plan to state agencies. The primary state agency, the Louisiana Department of Wildlife and Fisheries (LDWF), produced the Louisiana Artificial Reef Plan after consultation with other state agencies, as well as the oil and fishing industries.

Similar to the National Plan’s assignment of federal agency roles, the Louisiana Plan delegated the task of implementing the state’s artificial reef program to state agencies. The plan charges the LDWF with

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86 See id.
87 Id. The NFEA states that a permit holder must demonstrate to the ACE that it has “the financial ability to assume liability for all damages that may arise with respect to an artificial reef.” National Fishing Enhancement Act of 1984, 33 U.S.C. § 2104(c)(3) (2000); see discussion infra Part II.C (discussing liability in more detail).
90 Kaiser & Pulsipher, supra note 23, at 126.
91 See id. 126–27; La. Dep’t of Wildlife & Fisheries, supra note 22, at vii. Louisiana was the first gulf state to create an artificial reef program based on the NFEA. Id.
93 La. Rev. Stat. Ann. § 56:639.6(B)–7. Such enabling legislation was necessary to provide the Louisiana artificial reef program with the proper founding authority. La. Dep’t of Wildlife & Fisheries, supra note 23, at 7.
94 La. Dep’t of Wildlife & Fisheries, supra note 22, at 39–40. Chief among these interest groups were members of the fishermen’s lobby. Id. at 40.
95 Id. at 41.
primary responsibility for administering and enforcing the program, including developing permit applications.\textsuperscript{96} The LDWF’s Artificial Reef Development Fund assures that the reef program is adequately financed.\textsuperscript{97} Finally, two agencies associated with Louisiana State University provide scientific and technical support for reef site selection and development.\textsuperscript{98}

State agencies, therefore, play a primary role in the reef development process.\textsuperscript{99} State artificial reef plans provide for the specific implementation of the general guidelines set out in the NFEA and the National Plan.\textsuperscript{100} Moreover, state agencies may act as federal permit holders, and thus, accept liability if legal issues arise in the Rigs to Reefs program.\textsuperscript{101} The proper apportioning of liability is critical to the success of Rigs to Reefs because, without it, industry would be discouraged from participating in the program.\textsuperscript{102}

C. Treatment of Liability in the Rigs to Reefs Program

Rigs to Reefs relies on extensive industry participation to be successful; without industry donations of rigs, Rigs to Reefs would not exist.\textsuperscript{103} Rigs to Reefs provides the oil industry with an incentive to participate by allowing the industry to avoid many of the decommissioning costs associated with obsolete rigs.\textsuperscript{104} It is likely that this cost-saving incentive would be greatly negated if industry donors were subject to legal liability for accidents that occurred while converting a rig to a reef.\textsuperscript{105} However, reef permit holders would be unlikely to accept and bear the cost of rigs that industry has negligently decommissioned or

\textsuperscript{96} Id. at 42.
\textsuperscript{97} Id. at 8.
\textsuperscript{98} Id. at 41–43. These two agencies are the Louisiana Geological Survey (LGS) and the Center for Wetland Resources (CWR). Id. at 41. The LGS assists the LDWF in developing criteria for reef placement and by coordinating permitting procedures at the state and federal level. Id. at 42. The CWR provides the LDWF with criteria for the selection and development of sites and technical assistance for program development. Id. at 43.
\textsuperscript{99} See id. at 41.
\textsuperscript{101} REEF PLAN REVISION, supra note 14, at 12.
\textsuperscript{102} Dauterive, supra note 11, at iv, 4; Schroeder & Love, supra note 38, at 29.
\textsuperscript{103} Dauterive, supra note 11, at 4–5.
\textsuperscript{104} Id. at iv. The oil industry is spared the cost of removing the structures and towing them to land for disposal. Id. at 4.
\textsuperscript{105} See, e.g., DECOMMISSIONING COSTS, supra note 11, at app. B-1, B-2. For example, the MMS estimates that potential legal liability for just four rigs could exceed $1 billion. Id.
prepared for donation.\textsuperscript{106} Thus, for Rigs to Reefs to operate effectively,
it is critical for federal and state agencies to set clear guidelines that
fairly apportion liability among donors and permit holders.\textsuperscript{107}

At the conception of Rigs to Reefs, Congress and the federal and
state agencies recognized the importance of addressing the liability
issue.\textsuperscript{108} First, the NFEA, the enabling legislation of the federal artifi-
cial reef program, devoted a section to liability.\textsuperscript{109} Next, the National
Plan elaborated on the NFEA’s general treatment of liability through
a discussion of the impact of liability on private parties that partici-
pate in the reef development process.\textsuperscript{110} Finally, state plans such as
the Louisiana Artificial Reef Plan implemented the directives of the
NFEA and the National Plan concerning liability on the state level.\textsuperscript{111}

The NFEA deals with liability by establishing broad directives that
provide a basic framework for the treatment of liability in the federal
artificial reef program.\textsuperscript{112} The NFEA addresses liability as it pertains to
the federal government, to permit holders, and to donors of mate-
rial.\textsuperscript{113} The NFEA’s liability section immunizes the federal government
from liability to the greatest extent possible under the law.\textsuperscript{114} The legis-
lation also addresses the potential liability of permit holders.\textsuperscript{115} The
statute states that permit holders are immune from liability as long as
they comply with the terms and conditions of the permit.\textsuperscript{116} This acts as
both an assurance to permit holders and a directive to federal agencies
to ensure that permit conditions are clear and can be easily followed by

\textsuperscript{106} See id.
\textsuperscript{107} See Schroeder & Love, supra note 38, at 28–29.
\textsuperscript{109} Id. § 2104.
\textsuperscript{110} Reef Plan Revision, supra note 14, at 45–47. The National Plan divided the reef
development process into three stages: planning and permitting, construction, and moni-
toring. Id. at 38–39.
\textsuperscript{111} La. Dep’t of Wildlife & Fisheries, supra note 22, at 8; Mass. Div. of Marine
Fisheries, supra note 88, at 30; see 33 U.S.C. §§ 2103–2104; Reef Plan Revision, supra
note 14, at 47.
\textsuperscript{112} See 33 U.S.C. § 2104.
\textsuperscript{113} Id. § 2104(c)–(d).
\textsuperscript{114} Id. § 2104(d) (“Nothing in this chapter creates any liability on the part of the United
States.”). As the National Plan indicates, the statute may not cover all liability issues involving
the federal government. Reef Plan Revision, supra note 14, at 46. If not covered by the stat-
ute, liability issues “will require reference to maritime law, sovereign immunity, and tradi-
tional tort concepts.” Id.
\textsuperscript{115} 33 U.S.C. § 2104(c).
\textsuperscript{116} Id. § 2104(c)(1) (“A person to whom a permit is issued . . . shall not be liable for
damages . . . if the permittee is in compliance with [the] terms and conditions [of the
permit].”).
applicants. Yet the NFEA also clearly states that if a permit holder deviates from the terms of the permit, that permit holder must accept any accompanying liability. Thus, under the NFEA, the burden falls first on the government to draft clear permit conditions, and then on the permit holder to comply with such conditions.

The NFEA further addresses permit holder liability by qualifying the receipt of a permit on a permit holder’s “financial ability to assume liability for all damages that may arise with respect to an artificial reef.” This qualification has effectively limited the class of reef permit holders to those with substantial financial resources. Private parties have been unwilling to commit the financial resources necessary to qualify as permit holders under the NFEA, leaving state agencies as the only entities willing and able to hold artificial reef permits.

Although the NFEA has effectively precluded private parties from holding rig permits, the statute does provide qualified immunity for private donors of rigs or rig materials. Under the NFEA, any person who transfers title to a rig, or transfers reef construction materials to a permit holder, cannot be held liable for damages arising from the use of such materials so long as it meets certain criteria established by the ACE and other federal agencies. By establishing broad rules governing potential liability for the federal government, permit holders, and donors, the NFEA provides basic guidelines for the National Plan.

The National Plan adheres to the NFEA’s broad guidelines regarding liability, but discusses them in much greater detail. The
Plan addresses the application of NFEA’s liability rules to the federal government, permit holders, and donors.\textsuperscript{127} The Plan confirms that the NFEA creates no liability on the part of the United States, but then discusses ways that the United States may be liable under other statutes that are applicable to offshore rigs.\textsuperscript{128} For example, the Plan explains that the United States may be liable under the Suits in Admiralty Act for injuries or damage resulting from the maritime actions of the federal government.\textsuperscript{129} Under the Suits in Admiralty Act, if the ACE negligently authorized placement of a reef, the United States may be liable for any damage that resulted from that negligence.\textsuperscript{130}

The federal government may also be liable if the ACE fails to fulfill the NFEA’s baseline requirements for the placement and siting of reefs.\textsuperscript{131} The NFEA requires that artificial reef construction minimize environmental risks, and that the placement of a reef not create an unreasonable hazard to navigation.\textsuperscript{132} If the ACE issues permits that allow environmentally damaging materials, or authorizes a reef that creates a hazard to navigation, the federal government may be liable for the ACE’s actions.\textsuperscript{133} Another potential source of permit holder liability is the lack of compliance with systematic monitoring of each new reef.\textsuperscript{134} If permit holders do not comply with the systematic monitoring requirements, they may be held liable for accidents involving the reef.\textsuperscript{135}

\textsuperscript{127} Id. at 46.

\textsuperscript{128} Id.


\textsuperscript{130} Reef Plan Revision, supra note 14, at 46; see 46 U.S.C. app. §§ 741–745. The Plan notes that certain courts have implied an exemption from liability under the Suits in Admiralty Act for discretionary functions of the federal government. Reef Plan Revision, supra note 14, at 46. These courts have drawn on the concept of federal sovereign immunity to conclude that such an exemption from liability exists. Id. Under this analysis, a decision by a federal agency such as the ACE to permit a reef in a particular place, or to require certain materials for construction, would not create any liability applicable to the federal government, even if the agency knew that there were risks involved. Id. The federal government could be liable under this scenario only if the federal agency did not follow the NFEA’s explicit requirements. Id.

\textsuperscript{131} Reef Plan Revision, supra note 14, at 46.


\textsuperscript{133} See 33 U.S.C. § 2102; Reef Plan Revision, supra note 14, at 46.

\textsuperscript{134} Reef Plan Revision, supra note 14, at 47; see 33 U.S.C. § 2104(a)(2).

\textsuperscript{135} See Reef Plan Revision, supra note 14, at 47. The Plan notes that there should be only a slight possibility of liability as long as the reef has been appropriately located, marked on navigation charts, and the required surface markers are attached to the reef. Id. Additionally, users of an artificial reef assume some risk of injury, just as visitors to public parks do. Id.
After discussing federal government liability, the Plan addresses the NFEA’s treatment of permit holder liability. The Plan recommends that each state restrict eligibility to hold reef permits to that state’s natural resource agencies. According to the Plan, state agencies should be the sole holders of reef permits because they are the only entities with the financial ability to assume all liability, as required by the NFEA. However, the Plan leaves open the possibility for a state to extend its authority to hold permits to other entities, as long as the state informs the ACE that it has done so.

In addition to federal government and permit holder liability, the Plan supplements the NFEA’s guidelines for donor liability. The Plan echoes the NFEA’s assurances that donors will not be liable for accidents involving donated materials, as long as such materials meet the Plan’s requirements. Yet the Plan also cautions donors to verify that materials meet Plan guidelines and to document title transfers to ensure that donors’ liability terminates upon donation.

Finally, the National Plan briefly addresses the liability implications of private-party participation in reef construction, an area of liability that is not discussed in the NFEA. The Plan acknowledges that private parties often will participate in reef construction as volunteers or contractors of the permit holder. Because a properly drafted permit specifies the location and procedures of reef construction, permit

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136 *Id.* at 46–47.
137 *Id.* at 11–12.
138 *Id.*; *see* Mass. Div. of Marine Fisheries, *supra* note 88, at 37. In addition, state agencies should act as the sole permit holders because the states’ natural resource agencies hold the public trust in managing resources associated with artificial reefs. *Reef Plan Revision, supra* note 14, at 11–12.
139 *Reef Plan Revision, supra* note 14, at 11–12. Thus, the Plan appears to contemplate the possibility of private parties holding reef permits. *See id.* As this Note will argue, Rigs to Renewables would not have to rely on states extending their permit–holding authority to private parties because the ability of private parties to hold permits would be built into the program’s federal enabling legislation. *See discussion infra* Part III.B.
139 *See id.*
140 *Id.*; *see* 33 U.S.C. § 2104(c) (4). The Plan establishes criteria for reef materials based on the materials’ function, compatibility, stability, and durability. *Reef Plan Revision, supra* note 14, at 30–31. The Plan also describes the types of materials a permit holder may accept, including secondary-use materials, natural materials, and manufactured reef structures. *Id.* at 31–33.
142 *Reef Plan Revision, supra* note 14, at 47. Although the Plan focuses on donor liability, it also calls attention to the benefits that donors receive from donation, including treatment of the donation as a charitable contribution for tax purposes and favorable publicity for the donor. *Id.* at 33.
143 *Id.* at 47; *see* 33 U.S.C. § 2104(c) (4).
144 *Reef Plan Revision, supra* note 14, at 47.
holders need only ensure that their contractors or volunteers strictly adhere to permit requirements to be immunized from liability under the NFEA.\textsuperscript{145}

Using the National Plan as a guide, states like Louisiana address liability concerns specific to their situations.\textsuperscript{146} Just as the NFEA and the National Plan address liability concerns on the federal level, the Louisiana Fishing Enhancement Act (LFEA) and the Louisiana Artificial Reef Plan address liability issues specific to the State of Louisiana.\textsuperscript{147} The LFEA designates the State of Louisiana as the permit holder for artificial reefs developed under the National Plan, ensuring state control over reef permitting and development.\textsuperscript{148} The LFEA does not, however, foreclose the possibility that other groups could hold reef permits.\textsuperscript{149} Language in the LFEA indicates that the state may allow private parties to hold rig development permits.\textsuperscript{150} Before being allowed to hold such permits, however, private parties must demonstrate that they have the financial ability to assume all liability for the structure, as required by the NFEA.\textsuperscript{151}

Private parties generally donate the structures and materials that comprise an artificial reef.\textsuperscript{152} Louisiana acknowledges this fact by including in its reef plan a Donation Agreement to be signed by the state agency and the private donor.\textsuperscript{153} The Donation Agreement stipulates that the donor accepts liability for the donated structure until the structure is delivered and the state mails a Notification of Acceptance.\textsuperscript{154} This

\begin{itemize}
\item \textsuperscript{145} Id.
\item \textsuperscript{146} \textit{La. Dep’t of Wildlife & Fisheries}, supra note 22, at 8. Massachusetts’s state reef plan also has a comprehensive section addressing liability. \textit{Mass. Div. of Marine Fisheries}, supra note 88, at 36.
\item \textsuperscript{148} \textit{Id.} § 56:639.9(A).
\item \textsuperscript{149} \textit{See id.} § 56:639.9(B)(4).
\item \textsuperscript{150} \textit{Id.} (“The . . . Department of Wildlife and Fisheries . . . [shall] insure that artificial reef permits sought by groups other than Louisiana are consistent with the state plan developed under this Subpart and the National Fishing Enhancement Act.”).
\item \textsuperscript{151} \textit{See id.} § 2104(c)(3); \textit{La. Rev. Stat. Ann.} § 56:639.9(A)(4).
\item \textsuperscript{152} \textit{Dauterive}, supra note 11, at iv; \textit{Reef Plan Revision}, supra note 14, at 47.
\item \textsuperscript{153} \textit{See La. Dep’t of Wildlife & Fisheries}, supra note 22, at app. VII.
\item \textsuperscript{154} \textit{Id.} at app.VII § 7.1.
\end{itemize}
Donation Agreement helps to ensure that both the state and the donor follow the NFEA’s guidelines regarding private-party liability.\textsuperscript{155}

Rigs to Reefs’ treatment of liability is effective because it makes efficient use of a hierarchal framework.\textsuperscript{156} Federal agencies set broad guidelines for the program, while state agencies provide the specific details necessary for implementation of those guidelines on the state level.\textsuperscript{157} Incorporating this framework into Rigs to Renewables would ensure that the program has the broad federal guidance and specific state implementation that has proven to be effective in Rigs to Reefs.\textsuperscript{158}

III. RIGS TO RENEWABLES: INCORPORATING AND IMPROVING THE RIGS TO REEFs FRAMEWORK

A. The Rigs to Renewables Program

The Rigs to Renewables program would use old offshore oil rigs as renewable energy stations.\textsuperscript{159} Like Rigs to Reefs, Rigs to Renewables would promote conservation, while providing reduced decommissioning costs as an incentive for the oil industry to donate rigs to the program.\textsuperscript{160} In addition to creating this incentive for industry, the Energy Policy Act of 2005 provides grant funding and tax breaks for alternative energy development that may apply to donees who hold permits to develop the rigs.\textsuperscript{161} Because both rig donors and donees would have incentives to participate in the program, Rigs to Renewables could be a viable, pragmatic approach to alternative energy development.\textsuperscript{162}

The aim of this Note is to propose a legal and regulatory framework for Rigs to Renewables. Such a framework should be based on three pillars, which collectively incorporate the advantages of Rigs to Reefs and improve on its flaws.\textsuperscript{163} First, Rigs to Renewables should draw

\textsuperscript{155} See id.
\textsuperscript{156} See Reef Plan Revision, supra note 14, at 45–47.
\textsuperscript{157} See id.; see, e.g., La. Dep’t of Wildlife & Fisheries, supra note 22, at 7.
\textsuperscript{158} See Reef Plan Revision, supra note 14, at 45–47; see, e.g., La. Dep’t of Wildlife & Fisheries, supra note 22, at 7.
\textsuperscript{159} Geoghegan, supra note 8, at 34.
\textsuperscript{160} See Dauterive, supra note 11, at iv; Alex De Alessi, Private Reef Building: Two Case Studies 2 (1997); see, e.g., Decommissioning Costs, supra note 11, at ii tbl.1.
\textsuperscript{163} See 33 U.S.C. § 2103; La. Dep’t of Wildlife & Fisheries, supra note 22, at 7–8; Reef Plan Revision, supra note 14, at 1.
on the basic regulatory structure of the Rigs to Reefs program: a federal enabling statute, broad federal guidance, and detailed implementation by the states.\textsuperscript{164} Second, Rigs to Renewables should permit greater state control over the program than is currently allowed in Rigs to Reefs. This approach would enable more flexible approaches in achieving program goals.\textsuperscript{165} Third, the federal and state agencies in charge of Rigs to Renewables should regulate in a way that encourages private parties to hold rig-development permits, thereby greatly increasing the impact of the program.\textsuperscript{166} Taking these three steps would incorporate the hierarchal structure that is the strength of Rigs to Reefs, while addressing the inflexibility that is the program’s primary weakness.\textsuperscript{167}

B. Incorporating the Rigs to Reefs Framework

Rigs to Renewables should incorporate the basic structure that underlies the Rigs to Reefs program because such a structure provides a clear delineation of the roles of federal and state agencies.\textsuperscript{168} The NFEA, as the enabling legislation for the federal artificial reef program, is the legal authority for Rigs to Reefs.\textsuperscript{169} The NFEA delegates permitting authority to the ACE, and grants authority to coordinate agency efforts to create the National Plan to the NMFS.\textsuperscript{170} It is likely that the MMS and the ACE would have similar roles under Rigs to Renewables as they do under Rigs to Reefs.\textsuperscript{171} Thus, an enabling statute for Rigs to Renewables would contain language similar to the language

\textsuperscript{164} See 33 U.S.C. § 2103 (providing basic guidelines for authorities to use in implementing the program); LA. DEP’T OF WILDLIFE & FISHERIES, supra note 22, at 7–8 (describing state implementation of the National Plan); REEF PLAN REVISION, supra note 14, at 1 (providing more detailed direction to federal and state agencies).

\textsuperscript{165} See REEF PLAN REVISION, supra note 14, at 11–13.

\textsuperscript{166} See De Alessi, supra note 160, at 2–4.

\textsuperscript{167} See 33 U.S.C. § 2103; LA. DEP’T OF WILDLIFE & FISHERIES, supra note 22, at 7–8; REEF PLAN REVISION, supra note 14, at 1. The structure of Rigs to Reefs is more complex than the three tiers presented here. See REEF PLAN REVISION, supra note 14, at 8. For example, Rigs to Reefs also envisions roles for local governments, non-profit organizations, and concerned interest groups. Id. at 11–12. This Note does not propose to incorporate every aspect of Rigs to Reefs into Rigs to Renewables, only its basic structure. See id. at 9–12.

\textsuperscript{168} See REEF PLAN REVISION, supra note 14, at 4. Not only does a clear delineation of agency roles provide for the more efficient operation of government, it provides program participants—whether industry donors or permit holders—with certainty regarding program procedures. See id.

\textsuperscript{169} 33 U.S.C. §§ 2101–2106.

\textsuperscript{170} Id. §§ 2103–2104.

\textsuperscript{171} See id.; REEF PLAN REVISION, supra note 14, at 5, 7. The MMS oversees renewable energy and alternative uses in ocean waters. Id. at 6, 11–13.
in the NFEA. An enabling statute is necessary to provide the explicit legal authority for Rigs to Renewables, and it should be drafted using NFEA as a model.

The National Plan elaborates on the roles of the federal agencies described in the NFEA, and supplements the NFEA by emphasizing the critical role that state agencies play in the Rigs to Reefs program. Because state agencies would play a similarly crucial part in Rigs to Renewables, and describing these roles in detail would be beyond the pale of a Congressional statute, a national plan similar to the National Artificial Reef Plan likely would be necessary for Rigs to Renewables to succeed.

The National Plan’s section on state agencies provides examples of areas where state agency action is critical to Rigs to Reefs; in these areas, the NFEA provides only general comments. For example, the National Plan describes how state agencies should address industry liability concerns, specifically, by acting as the holders of federal permits. Additionally, the National Plan suggests that state agencies work with local governments within their states to coordinate reef construction programs and publicize local reef efforts, among other activities. Aside from brief instructions on permit holding and working with local governments, however, the National Plan provides little guidance to state agencies.

By acting as permit holders, states are the linchpin of Rigs to Reefs’ approach to handling potential liability. Yet the NFEA’s section on liability does not mention state agencies, presumably leaving the task of defining the agencies’ roles to the National Plan, which can provide for more detailed treatment of states and liability than possible in NFEA. Moreover, the NFEA does not mention the relationship between state and local governments, which is thoroughly presented in the National Plan. These examples demonstrate how the National

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173 See id.
175 See id.
177 See 33 U.S.C. § 2104; Reef Plan Revision, supra note 14, at 12.
178 Id. at 13. Other areas of potential cooperation between state and local governments include providing technical support for community efforts, furnishing financial assistance to reef programs, and obtaining state funding for local reef efforts. Id.
179 See id. at 11–13.
180 See id. at 12.
181 See 33 U.S.C. § 2104; Reef Plan Revision, supra note 14, at 12.
Plan includes critical aspects of Rigs to Reefs that are beyond the scope of an enabling statute like the NFEA.\textsuperscript{183} Therefore, it is likely that Rigs to Renewables, because it is similar to Rigs to Reefs, would also require a national plan.\textsuperscript{184} Such a plan would provide the details to supplement the enabling statute’s general guidelines, and would coordinate the actions of state agencies, which would be largely responsible for the actual implementation of the program.\textsuperscript{185}

In Rigs to Reefs, state agencies provide for the implementation of the program by creating individualized state artificial reef plans.\textsuperscript{186} To benefit from the clear delineation of agency roles that is the advantage of the Rigs to Reefs system, Rigs to Renewables should require detailed state plans similar to those in Rigs to Reefs.\textsuperscript{187} State plans are essential to the success of a national program such as Rigs to Renewables for two reasons. First, state plans can consider conditions particular to the state that would affect the implementation of Rigs to Renewables.\textsuperscript{188} For example, the Louisiana Artificial Reef Plan established artificial reef planning zones, which encourage artificial reef development in some offshore areas and discourage it in others, based on characteristics particular to the locale, such as hydrological and geologic conditions.\textsuperscript{189} These development zones are critical to effective reef development in Louisiana.\textsuperscript{190} Because the National Plan is unable to account for the particular characteristics of every state participating in Rigs to Reefs, state plans play an important role in providing such details.\textsuperscript{191}

Second, states can take advantage of the small scale of their reef programs to implement creative solutions that are not possible at the national level.\textsuperscript{192} For example, the Louisiana Artificial Reef Plan notes that state and local groups in Florida have acquired and transported

\textsuperscript{183} See Reef Plan Revision, supra note 14, at 11–13.
\textsuperscript{185} See Reef Plan Revision, supra note 14, at 11.
\textsuperscript{186} Id. See La. Dep’t of Wildlife & Fisheries, supra note 22, at 9; Mass. Div. of Marine Fisheries, supra note 88, at 13.
\textsuperscript{187} See La. Dep’t of Wildlife & Fisheries, supra note 22, at 4; Reef Plan Revision, supra note 14, at 11.
\textsuperscript{188} See, e.g., Mass. Div. of Marine Fisheries, supra note 88, at 11–16 (examining the unique location, geography, oceanographic conditions, and ecology).
\textsuperscript{189} See La. Dep’t of Wildlife & Fisheries, supra note 22, at 11, 17–18. Alabama and Florida have made efforts to allow private parties to play a larger role in reef construction and development. See De Alessi, supra note 160, at 2–4.
\textsuperscript{190} See La. Dep’t of Wildlife & Fisheries, supra note 22, at 20.
\textsuperscript{191} See, e.g., Mass. Div. of Marine Fisheries, supra note 88, at 11–16.
\textsuperscript{192} See, e.g., La. Dep’t of Wildlife & Fisheries, supra note 22, at 4.
rigs from the coast of Louisiana, where they are plentiful, to the coast of Florida, where they are less numerous.\textsuperscript{193} Florida then used the rigs in its own Rigs to Reefs program.\textsuperscript{194} The national focus of the NFEA and the National Plan prevent federal agencies from realizing opportunities for creative solutions, such as the cooperative effort between Louisiana and Florida, that arise on the state level.\textsuperscript{195} Delegating the bulk of responsibility enables the states to act as laboratories and to devise new ways to implement the goals set out in the National Plan.\textsuperscript{196}

In sum, Rigs to Renewables should make use of the three-tiered structure underlying Rigs to Reefs because such a structure would provide clear roles for federal and state agencies.\textsuperscript{197} An enabling statute like the NFEA would provide the legal authority for Rigs to Renewables.\textsuperscript{198} A national plan would provide the details necessary to delineate the roles of federal agencies in the program.\textsuperscript{199} Finally, state plans would allocate responsibility for implementing Rigs to Renewables among the state agencies, giving them the flexibility to respond to local conditions and adopt creative solutions to alternative energy development.\textsuperscript{200}

C. Improving the Rigs to Reefs Framework

While Rigs to Renewables should adopt Rigs to Reefs’ approach of delegating the bulk of responsibility to the states, the program should improve on the Rigs to Reefs framework in two ways. First, Rigs to Renewables should allow the ACE to delegate permitting responsibility to qualified states, which would likely process permits more efficiently

\begin{itemize}
  \item \textsuperscript{193} \textit{Id.}
  \item \textsuperscript{194} \textit{See id.} The Louisiana reefs may need to be modified to account for the difference in soil and topographic conditions between the Louisiana and Florida coasts. De Alessi, supra note 160, at 2–4. For example, it may be more difficult to anchor light reefs off of the Florida coast because the sandy ocean floor is less amenable to reef settling than the muddy ocean floor off of the Louisiana coast. \textit{Id.}
  \item \textsuperscript{195} \textit{See La. Dep’t of Wildlife & Fisheries, supra note 22, at 4; Reef Plan Revision, supra note 14, at 1.}
  \item \textsuperscript{196} \textit{See La. Dep’t of Wildlife & Fisheries, supra note 22, at 4; Mass. Div. of Marine Fisheries, supra note 88, at 30.}
  \item \textsuperscript{197} \textit{See Reef Plan Revision, supra note 14, at 6–13.}
  \item \textsuperscript{199} \textit{See Reef Plan Revision, supra note 14, at 4.}
  \item \textsuperscript{200} \textit{See, e.g., La. Dep’t of Wildlife & Fisheries, supra note 22, at 4; Mass. Div. of Marine Fisheries, supra note 88, at 11–16.}
\end{itemize}
than the ACE. Second, the federal and state agencies governing Rigs to Renewables should regulate to encourage private parties to hold rig development permits. The NFEA effectively limits the class of permit holders to public agencies, which limits Rigs to Reefs’ impact because there are fewer participants in the program. By giving greater responsibility to states and to private parties than they possess under Rigs to Reefs, Rigs to Renewables would increase program participation and enhance program effectiveness.

1. Delegating Permitting Responsibility to the States

States could process permits more efficiently than the ACE. Increased efficiency in permit processing would act as an incentive to potential permit holders to apply for permits. Increasing the number of permit holders, in turn, would achieve a primary goal of Rigs to Renewables of utilizing the basic Rigs to Reefs model and expanding on the model’s scope and effectiveness.

While states do not have permitting power under Rigs to Reefs, other environmental programs allow the ACE to delegate its permitting power to the states. For example, the ACE has delegated its wetlands permitting power under section 404 of the Clean Water Act (CWA) to the states of New Jersey and Michigan. The CWA permitting program is similar to the structure of Rigs to Reefs in that both programs involve extensive cooperation between federal and state agencies. Moreover, like Rigs to Reefs, the CWA relies on states to implement much of the program’s federal guidelines and regulations. Since the ACE dele-

201 See AM. ASS’N OF STATE HIGHWAY & TRANSP. OFFICIALS, DELEGATION OF FEDERAL ENVIRONMENTAL RESPONSIBILITIES FOR HIGHWAY PROJECTS 32 (2002) [hereinafter DELEGATION].
204 See De Alessi, supra note 160, at 4.
205 See DELEGATION, supra note 201, at 24–25, 32.
206 See id.
207 See id.
208 See id. at iv; LA. DEP’T OF WILDLIFE & FISHERIES, supra note 22, at 19–20.
210 See Delegation, supra note 207, at 23; REEF PLAN REVISION, supra note 14, at 9–11.
211 See DELEGATION, supra note 201, at 23.
gated its CWA permitting power to New Jersey and Michigan, the permitting process in those states has improved.\footnote{Id. at 24–25. Staff involved in both the New Jersey and Michigan permitting programs have found the permitting process to be more efficient and predictable than the permitting program run by the ACE. Id.}

By giving states control of the permit process, while allowing the ACE to retain oversight, Rigs to Renewables would improve the efficiency of the Rigs to Reefs permit process, while still providing for the federal agency oversight.\footnote{See National Fishing Enhancement Act of 1984, 33 U.S.C. §§ 2101–2106 (2000); Delegation, supra note 201, at 32.} Increased efficiency in the permit process likely would stimulate participation in Rigs to Renewables, particularly when coupled with regulations that encourage private parties to hold rig development permits.\footnote{See Delegation, supra note 201, at 1; De Alessi, supra note 160, at 5.}

2. Encouraging Private Parties to Hold Rig Permits

Encouraging private parties to hold rig development permits not only may increase participation in Rigs to Renewables, it may stimulate innovation by private parties in reef development.\footnote{See Delegation, supra note 201, at 1; De Alessi, supra note 160, at 5.} But in order to encourage private parties to participate, Rigs to Renewables would need to adopt less restrictive liability rules than Rigs to Reefs.\footnote{See Delegation, supra note 201, at 4; La. Dep’t of Wildlife & Fisheries, supra note 22, at 19–20; Reef Plan Revision, supra note 14, at 37–39.} The NFEA requires a permit holder to demonstrate the financial ability to assume liability for all damages that may arise with respect to an artificial reef.\footnote{33 U.S.C. § 2104 (c)(3).} Requiring permit holders to assume all liability effectively precludes private parties from holding reef permits because most private parties are unwilling or unable to expose themselves to such financial risk.\footnote{Mass. Div. of Marine Fisheries, supra note 88, at 1, 37.} By effectively excluding private parties from reef development, the NFEA eliminates a potential source of innovation and limits the effectiveness of Rigs to Reefs.\footnote{Mass. Div. of Marine Fisheries, supra note 88, at 1, 37; De Alessi, supra note 160, at 5.} Rigs to Renewables should encourage innovation by allowing private permit holders to share liability exposure with the states instead of assuming all liability themselves.\footnote{See 33 U.S.C. § 2104 (c)(3); Reef Plan Revision, supra note 14, at 9.}

The state artificial reef programs in Alabama and Florida provide evidence of the positive impact of private innovation on state reef pro-
Most states restrict reef development to state agencies. However, Alabama and Florida allow private parties to develop artificial reefs in limited areas. Private parties may construct and site reefs within these areas, but after construction is complete, the private parties must transfer title of the reefs to the state. The state, as permit holder, then assumes all liability for the use of the reef as required under the NFEA.

Allowing private parties to play a greater role in reef development and construction is a relatively minor innovation within the NFEA’s restrictive liability rules. Yet even this minor innovation has increased the scope and effectiveness of the artificial reef programs in Alabama and Florida. Soon after Alabama began allowing private reef construction, the number of reefs developed off the Alabama coast skyrocketed. Eventually the increase in the number of reefs led to a dramatic rise in the number of fish caught off of Alabama’s shores, though surrounding states with more traditional reef programs experienced no such increases. By allowing private parties to play a leading role in reef construction, Alabama was able to implement Rigs to Reefs’ directive to enhance offshore fisheries more effectively than those states that relied solely on public agencies for reef development.

While the success of the program in Alabama demonstrates the effectiveness of private participation, the liability rules set out in the NFEA limit the ability of state reef programs to increase private participation. Private parties generally have been willing to participate in reef construction, but they have not been as willing to act as permit holders.}

\footnotesize{De Alessi, supra note 160, at 2–4. Because there are fewer oil rigs off the Alabama and Florida coasts, many of the artificial reefs have been created from large sections of concrete and other construction materials rather than from rigs. Id. However, the effectiveness of private participation in reef development demonstrated by these states is applicable to renewable development using oil rigs. See id.}

\footnotesize{See De Alessi, supra note 160, at 2; see, e.g., La. Dep’t of Wildlife & Fisheries, supra note 22, at 19–20.}

\footnotesize{De Alessi, supra note 160, at 2–4.}

\footnotesize{See id.}

\footnotesize{33 U.S.C. § 2104(c)(3).}

\footnotesize{See id.; De Alessi, supra note 160, at 5.}

\footnotesize{See De Alessi, supra note 160, at 2–4.}

\footnotesize{Id.}

\footnotesize{Id. For example, fishermen in Alabama caught the red snapper at a rate that was two to five times higher than any other Gulf Coast state for the same time period, even though Alabama occupies only one and a half percent of the Gulf coastline. Id.}

\footnotesize{See id.}

\footnotesize{See National Fishing Enhancement Act of 1984, 33 U.S.C. § 2104 (2000); De Alessi, supra note 160, at 5; Reef Plan Revision, supra note 14, at 11.}
holders because of the NFEA’s requirement that permit holders accept all liability for potential damages involving a reef.\textsuperscript{232}

If it were not for the NFEA’s liability rules, private parties likely would apply for rig development permits because of the potential economic benefits of holding such permits.\textsuperscript{233} Chief among these benefits would be the permit holder’s exclusive right of access to the reef, for at least a period of time.\textsuperscript{234} In contrast, even under the Alabama reef program, the only economic incentive to private participation is the informal guarantee that private participants will be the first to learn of newly constructed reefs and thereby can be the first to exploit them until the location of the reefs becomes known.\textsuperscript{235}

Since allowing private parties to hold permits would benefit both private parties and the entire Rigs to Renewables program, Rigs to Renewables should restructure the NFEA’s restrictive liability guidelines.\textsuperscript{236} By creating liability rules that encourage private participation, Rigs to Renewables could allow states and private parties to innovate and increase the effectiveness of state programs.\textsuperscript{237} Because Rigs to Renewables would be a cooperative effort between government and private groups, Rigs to Renewables should look to other public-private joint ventures in structuring its liability rules.\textsuperscript{238} Other public-private joint ventures make use of shared liability to encourage private participation.\textsuperscript{239} For example, both the United States and British governments provide terrorism reinsurance programs to stimulate industry participation and lower prices in the terrorism insurance market.\textsuperscript{240} In the United States, private insurers assume all liability for terrorism damages up to a certain dollar amount.\textsuperscript{241} Once that dollar amount is exceeded, private insurers split the excess liability costs evenly with the federal

\textsuperscript{232} See 33 U.S.C. § 2104(c)(3); De Alessi, supra note 160, at 4; Mass. Div. of Marine Fisheries, supra note 88, at 1, 37.

\textsuperscript{233} See 33 U.S.C. § 2104(c)(3); De Alessi, supra note 160, at 4.

\textsuperscript{234} See De Alessi, supra note 160, at 5.

\textsuperscript{235} Id. at 2–4. This advantage disappears after reefs become widely known. Id. It is important to note that even under the Alabama plan, there are non-economic incentives for private participation as well as economic incentives. Id. at 3. For example, private reef development often prevents overfishing. Id. at 5.

\textsuperscript{236} See 33 U.S.C. § 2104(c)(3); De Alessi, supra note 160, at 5.

\textsuperscript{237} See De Alessi, supra note 160, at 5.

\textsuperscript{238} See id. at 9; Reef Plan Revision, supra note 14, at 14.

\textsuperscript{239} See La. Dep’t of Wildlife & Fisheries, supra note 22, at 17–18; Mass. Div. of Marine Fisheries, supra note 88, at 8–10.

\textsuperscript{240} See 33 U.S.C. §§ 2103–2104; Reef Plan Revision, supra note 14, at 22.

\textsuperscript{241} See La. Dep’t of Wildlife & Fisheries, supra note 22, at 2; Mass. Div. of Marine Fisheries, supra note 88, at 33.
government, again up to a certain dollar amount. If that amount is surpassed, the federal government assumes all remaining liability for terrorism damages. This system encourages private participation because private insurers can be certain of the extent of their liability, and can therefore more easily quantify their risk.

Rather than requiring private permit holders to assume all liability themselves, Rigs to Renewables should utilize a similar system of shared liability to encourage private participation. As permit holders, private parties should be required to assume all liability up to a certain dollar amount. The states should assume any liability beyond that amount. Unlike the Rigs to Reefs liability rules, in which private permit holders’ liability is theoretically unlimited, such shared liability would encourage private parties to participate in Rigs to Renewables because their potential liability would be limited to a set dollar amount. Increased private participation would stimulate innovation and enhance Rigs to Renewables’ ability to promote alternative energy development.

**Conclusion**

The Energy Policy Act of 2005 indicates that the regulatory climate surrounding renewable energy is as favorable as it has ever been. Rigs to Renewables would exploit the incentives for renewable energy provided by the Act, while minimizing NIMBY opposition and providing significant cost savings to oil industry donors. But, in addition to offering compelling political and economic incentives, Rigs to Renewables must also be based on a solid legal and regulatory framework to be successful in attaining its energy development goals. This framework must delineate public and private roles in the areas of agency jurisdiction,

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244 See De Alessi, *supra* note 160, at 5; Reef Plan Revision, *supra* note 14, at 25.
permitting authority, and legal liability, yet be flexible enough to respond to specific needs at the local level.

Rigs to Renewables should adopt the Rigs to Reefs regulatory framework because that framework provides a clear delineation of roles and delegation of authority. National enabling legislation provides the legal authority for the program, and includes basic guidelines as to agency roles, permitting regulations, and liability. A national plan elaborates on the enabling legislation’s basic guidelines, particularly as applied to the role of federal agencies in the program. The bulk of responsibility for implementing the program is delegated to the states. The states then promulgate state plans that allocate responsibility among the state agencies and respond to local conditions.

Rigs to Renewables should improve the Rigs to Reefs framework by allowing states greater flexibility to implement their own solutions to alternative energy development. Rigs to Reefs’ rules regarding permitting authority and liability effectively preclude states from improvising and prevent private parties from participating in the program. Rigs to Renewables should adopt rules better suited to increase program participation and effectiveness. The program should allow states to assume full responsibility for permitting from the federal government, as is done under environmental statutes like the CWA. Additionally, Rigs to Renewables should encourage private parties to hold rig development permits by explicitly providing for such parties in its enabling legislation, and by endorsing a shared liability scheme similar to arrangements that exist in other public-private joint ventures. Incorporating the Rigs to Reefs framework with these key modifications will ensure that Rigs to Renewables is best able to achieve its goal of providing clean, independent sources of renewable energy.
PUTTING INTERNATIONAL AVIATION INTO THE EUROPEAN UNION EMISSIONS TRADING SCHEME: CAN EUROPE DO IT FLYING SOLO?

 DANIEL B. REAGAN*

Abstract: In December 2006, the European Commission announced a proposal for a directive that would bring international civil aviation within its Emissions Trading Scheme, the most ambitious international carbon dioxide emissions trading scheme to date, and the European Union’s primary means of meeting its Kyoto Protocol obligations. While aviation and environmental stakeholders throughout the world have showed strong support for the proposal, representatives of aviation interests inside, and especially outside, the European Union have reacted with skepticism and concern. This Note discusses the international civil aviation regulatory framework and the mechanics of the proposed directive. It then explores the political, technical, and legal implications of the proposed legislation and concludes that the European Commission should not include international aviation in the European Union Emissions Trading Scheme, but rather should vigorously pursue multilateral international aviation emissions reductions through the International Civil Aviation Organization.

INTRODUCTION

Aircraft release gaseous and particulate emissions at high altitudes directly into the atmosphere. 1 These emissions likely contribute to climate change through altering the atmospheric concentrations of greenhouse gases—including carbon dioxide (CO₂), ozone (O₃), and methane (CH₄)—forming condensation trails, and increasing cirrus cloudiness. 2 Aircraft emissions account for approximately two percent

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2 Id. See generally Intergovernmental Panel on Climate Change [IPCC], Climate Change 2007: The Physical Science Basis, Summary for Policy Makers (2007), available at
of global CO₂ emissions. These emissions are projected to increase as the international civil aviation industry expands.

Global concern over the climate change effects of greenhouse gas emissions, particularly CO₂, continues to increase. Regulatory bodies are extending their reach to cover CO₂ emissions. During the last two decades, concerned regulatory bodies have moved beyond traditional command-and-control regulation and have developed novel emissions regulation mechanisms, including market-based systems such as emissions trading. The European Union (EU) has implemented its Emissions Trading Scheme (ETS)—the most ambitious CO₂ emissions trading scheme to date—as a primary means of meeting its Kyoto Protocol targeted CO₂ emissions reductions. Phase I of the ETS began on January 1, 2005, and is limited to CO₂ emissions from industrial installations in the energy, metal production, mineral, and paper industries in EU member-states. The EU is employing a phased implementation of the ETS, with successive iterations featuring tightened emissions targets and expanded coverage of new industries.

On December 20, 2006, the European Commission (EC), the executive body of the EU, announced a proposal for a directive (Proposed Directive) that would bring civil aviation within the ETS. The Proposed Directive would extend the ETS to cover flights within the EU in 2011 and all flights arriving in or departing from the EU in 2012.
While aviation only accounts for a small portion of EU greenhouse gas emissions, the EC posits that failing to include aviation in the ETS would offset greater than twenty-five percent of its Kyoto CO₂ emissions reductions.¹³

While aviation and environmental policy stakeholders throughout the world have showed strong support for the Proposed Directive, representatives of aviation interests inside and outside the EU have reacted with skepticism and concern.¹⁴ Non-EU aviation interests critical of the Proposed Directive have focused their attention on the Directive’s extension of the ETS to flights originating outside of the EU or departing from an EU airport with a destination outside of the EU.¹⁵ These representatives have raised political, technical, and legal critiques of the Proposed Directive’s extension of the ETS to international aviation and have suggested that these concerns might ripen into legal action to block the implementation of the Directive.¹⁶ They argue that extending the ETS to international aviation is politically and technically suspect and in violation of the existing regulatory framework for international civil aviation, which is comprised of the International Convention on Civil Aviation (Chicago Convention or Convention), bilateral air service agreements (ASAs) between states, and international law.¹⁷

Part I of this Note provides an overview of international civil aviation law. Part II describes the mechanics of the Proposed Directive and the EU rationale for including aviation within the ETS. Part III discusses the political, technical, and legal implications of the Proposed Directive’s extension of the ETS to international aviation. In light of the implications described in Part III, Part IV concludes that the EC

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¹⁴ See Mark Pilling & Jackie Thompson, Carbonstorm, AIRLINE BUSINESS, Jan. 22, 2007, available at 2007 WLNR 2438040 (detailing the international response to the Proposed Directive, including the views of aviation representatives in the EU, United States, Asia, the Middle East, Africa, and Latin America).

¹⁵ See Press Release, United States Mission to the European Union, U.S.’s Byerly Reaffirms Commitment to Finalizing Transatlantic Air Services Accord (Jan. 11, 2007), http://useu.usmission.gov/Dossiers/Open_Skies/Jan1109_Byerly_Roundtable.asp [hereinafter U.S.-EU Mission Open Skies Press Release] (“The EU can do what it wants with its own carriers. That we don’t challenge. We, along with many other countries around the world simply object to the mandatory and unilateral inclusion of all carriers in the EU scheme.” (quoting John Byerly, U.S. Deputy Assistant Secretary of State for Transportation Affairs)).

¹⁶ See discussion infra Part III.

¹⁷ See discussion infra Part III.
should not include international aviation in the ETS but rather should vigorously pursue multilateral international aviation emissions reductions through the International Civil Aviation Organization (ICAO).

I. INTERNATIONAL CIVIL AVIATION LAW

A. The Convention on International Civil Aviation

The Convention on International Civil Aviation is the legal framework for modern international civil aviation. The Convention was a product of the International Civil Aviation Conference, held in Chicago from November 1 to December 7, 1944. At the invitation of the U.S. government, representatives from fifty-two participating countries convened in Chicago to establish a legal structure for post-World War II international civil aviation. Since the Convention came into effect on April 4, 1947, more than 180 states, representing broad geographic and economic diversity, have become signatories. The stated purpose of the Convention is to ensure that international civil aviation develops in a safe and orderly manner based on the principles of equality of opportunity, as well as sound and economical operation of air transport services. The rights, privileges, and restrictions of the signatory states are detailed in the ninety-six articles of the Convention. Technical international standards and recommended practices are described in the eighteen annexes to the Convention.

B. The ICAO

The Chicago Convention ICAO, a specialized agency of the United Nations, to enable the objectives of the convention and regulate international civil aviation. The primary objectives of the ICAO include:

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20 Id.
23 Buergenthal, supra note 19, at 4.
25 Buergenthal, supra note 19, at 4–5.
insuring the safe development of aviation throughout the world; meeting the aviation needs of the world population; preventing economic waste due to unreasonable competition; and avoiding discrimination among member-states. 26 The ICAO consists of an Assembly, a Council, and other subsidiary bodies. 27 Each member-state has one vote in the Assembly, which is the sovereign body of the ICAO. 28 The Assembly meets at least once every three years to review the work of the organization, elect the Council, delegate matters to the Council or a subsidiary body, decide on agreements with other international actors, amend the Convention, and address any issue not specifically assigned to the Council. 29 Measures put to a vote in the Assembly must pass by a simple majority. 30

The governing body, the Council, is composed of thirty-six representatives elected for three-year terms. 31 Council membership is controlled so that adequate representation is given to states of primary importance in international civil aviation, states that otherwise would not be included who provide a large contribution to aviation facilities, and states not otherwise included whose inclusion ensures representation of each major geographic region of the world. 32 The Convention vests in the Council legislative authority to draft and adopt international standards and recommended practices and to incorporate them in annexes to the Convention. 33

C. ICAO Rulemaking and Guidance

ICAO guidance reaches nearly all matters relating to international civil aviation. 34 Uniformity in aviation practices among member-states is an essential and consistent theme found throughout the Convention. 35 The ICAO favors stability and consensus in rulemaking to ease the

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26 Chicago Convention, supra note 22, art. 44.
27 Buergenthal, supra note 19, at 6.
28 Id.
30 Buergenthal, supra note 19, at 6.
32 Id.
33 Id.
34 See Abeyratne, supra note 18, at 280.
35 Chicago Convention, supra note 22, art. 37 (committing parties to work toward uniformity to “the highest degree practicable” in regulations, standards, and procedures affecting aviation).
harmonization of national regulations with international standards and practices and to increase the likelihood of such harmonization.\textsuperscript{36}

1. Technical Matters

One of the Council’s primary functions is to draft and adopt international standards and recommended practices to provide guidance on technical matters related to international aviation.\textsuperscript{37} The ICAO defines standards as any specification that’s uniform application is recognized as necessary for the safety or regularity of international air transport and to which member-states will conform in accordance with the Convention.\textsuperscript{38} Recommended practices are defined as any specification that’s uniform application is recognized as desirable for the safety or regularity of international air transport and to which member-states will endeavor to conform in accordance with the Convention.\textsuperscript{39}

After a two-thirds majority vote of the Council, standards and recommended practices become binding on all member-states who do not notify the Council of their objection within sixty days.\textsuperscript{40} The Convention provides that when a member-state finds it cannot reasonably comply with a standard or practice, it notify the ICAO, which in turn will notify the remainder of the member-states.\textsuperscript{41} This enactment procedure is flexible by design and accounts for the divergent levels of economic development and power among the member-states.\textsuperscript{42}

2. Economic Matters

The ICAO has elaborated on the few Chicago Convention provisions regarding economic rights and offered guidance to prevent the imposition of economic barriers to international aviation.\textsuperscript{43} Article 15 of the Chicago Convention provides that aviation facilities and services

\textsuperscript{36} Abeyratne, \textit{supra} note 18, at 15–17.
\textsuperscript{37} Memorandum on the ICAO, \textit{supra} note 31; see Booklet on the Annexes to the Chicago Convention, \textit{supra} note 24.
\textsuperscript{38} Abeyratne, \textit{supra} note 18, at 16.
\textsuperscript{39} Id.
\textsuperscript{40} Miller, \textit{supra} note 29, at 707.
\textsuperscript{41} Chicago Convention, \textit{supra} note 22, art. 38.
\textsuperscript{42} Miller, \textit{supra} note 29, at 728–29.
providers in signatory states may assess charges to recover their costs. Article 15 further provides that no signatory state shall impose a charge based solely on right of transit, entry, or exit. Subsequent ICAO guidance on Article 15 suggests that any charges assessed should be calculated to recover the cost of the facilities and services provided and should not exceed that amount.

While the Chicago Convention itself does not deal extensively with taxes on international aviation, Article 24 exempts fuel and other supplies arriving on board from a “customs duty” and other charges. Subsequent ICAO guidance on taxation suggests that this exemption applies to “import, export, excise, sales, consumption and internal duties and taxes of all kinds levied upon the fuel.” Member-states typically negotiate taxation schemes in ASAs. Concerned with the proliferation of bilateral taxation between member-states, the ICAO has reiterated its firm support of the principle of nontaxation of international aviation.

3. Environmental Matters

The ICAO has demonstrated sustained responsiveness to environmental concerns. Following the United Nations Conference on the Human Environment in 1972, the Assembly recognized in a resolution that international aircraft operation may have an adverse environmental impact. In 1983, the ICAO established the Committee on Aviation Environmental Protection (CAEP) to make recommendations regarding environmental issues relating to civil aviation to the Assembly and Council. The CAEP currently retains primary responsibility for most of the ICAO’s environmental efforts.

Annex 16 to the Convention, entitled Environmental Protection, details international aviation standards and recommended practices related to environmental quality. The first volume of the Annex ad-
addresses aircraft noise and its impact on the human environment. The adverse effects of aircraft noise are of particular concern to member states in Europe, where airports tend to be located in areas with high population densities. The second volume of the Annex addresses engine emissions and prescribes design specifications for the emission of smoke, hydrocarbons, carbon monoxide, and nitrogen oxides. These technical standards acquire practical effect as engine manufacturers design and build engines to comply with the Annex 16 specifications.

In 1998, the third Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), at Kyoto, Japan, formalized the role of the ICAO in pursuing greenhouse gas emission reductions in international aviation. The Kyoto Protocol makes signatory states responsible for emissions from domestic aviation, as Article 2.2 provides that signatory states shall work through the ICAO in achieving international aviation greenhouse gas emissions reductions. At the ICAO’s request, the United Nation’s Intergovernmental Panel on Climate Change prepared and published a report in 1999 that focused on aviation’s role in climate change. The ICAO has also consulted the UNFCCC’s Subsidiary Body on Scientific and Technological Advice on methods for collecting and reporting data on national greenhouse gas emissions.

As environmental issues become increasingly entwined with economic, technical, and international policy, the ICAO’s environmental efforts have expanded from setting technical standards on noise and emissions to considering market-based mechanisms to mitigate the ad-

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56 Id.
58 Booklet on the Annexes to the Chicago Convention, supra note 24.
59 Miller, supra note 29, at 714.
61 Id. (“The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.”).
63 Id.
verse effects of aviation on the environment. In 2004, the Assembly issued a resolution summarizing ICAO guidance on market-based emissions measures. The resolution focused on the voluntary emission reduction efforts of member-states, emissions-based taxes and charges, and emissions trading. The Assembly encouraged member-states to develop and implement voluntary emissions reduction measures and to report to the ICAO on the success of such measures. The Assembly encouraged adherence to its earlier guidance on the implementation of taxes and charges and counseled against the unilateral implementation of emissions levies. With respect to emissions trading, the Assembly endorsed the further development of an international trading system. The Assembly contemplated two possible emissions trading systems: (1) an international developed and administered system by the ICAO, or (2) ICAO oversight of the integration of international aviation with pre-existing emissions trading regimes among member-states.

The ICAO continues to work on developing guidance on an international aviation emissions trading regime. Following its meeting in February of 2007, the CAEP announced recommendations for the inclusion of international aviation emissions in ICAO member-state trading systems. The CAEP suggestions included: aircraft operators should be the regulated entity; operator obligations should be based on aggregated emissions of covered flights; CO₂ should initially be the only covered emission; and foreign operators should only be included on a mutually agreed upon basis while member-states continue to consider further options. In May 2007, the ICAO hosted its second Colloquium on Aviation Emissions to elaborate on CAEP’s most recent work and to

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66 Id. at I-47 to I-48.
67 Id. at I-47.
68 Id.
69 Id. at I-48.
70 Id.
73 Id.
inform the discussion of aviation mitigation measures among member-states.\(^{74}\) At the Assembly meeting in September 2007, the ICAO agreed to create a new Group on International Aviation and Climate Change to facilitate the creation of an “implementation framework,” member-states may use this framework to achieve emissions reductions through market-based measures, as well as technological advances, operational measures, and improvements in air traffic management.\(^{75}\)

**D. Bilateral ASAs**

An expansive network of bilateral ASAs between countries figures prominently in international aviation law.\(^{76}\) The Convention devotes little attention to the establishment of multilateral agreements on economic rights.\(^{77}\) Under the general guidance of Article 6, which provides that no scheduled international air service may occur without prior authorization, governments have negotiated economic rights through ASAs.\(^{78}\) The agreement negotiated between the United States and United Kingdom in 1946—exchanging air traffic rights—served as an early prototype for ASAs.\(^{79}\) In the years following, these ASAs proliferated between member-states, creating an extensive web of such agreements.\(^{80}\) A modern bilateral agreement typically covers designation of carriers and routes, capacity, rates, discrimination and fair competition, security, and dispute resolution.\(^{81}\)

There is a growing trend among member-states to negotiate multilateral open skies agreements that commit a larger number of states to decrease government restrictions on air transport services.\(^{82}\) After years of negotiations, the United States and the EU, agreed upon the terms of a liberalized multilateral agreement to replace the web of ASAs be-

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76 Miller, *supra* note 29, at 707.

77 *Id.* at 707–08.

78 *Id.* at 708.

79 Dempsey, *supra* note 57, at 238.

80 *Id.*

81 *Id.* at 239; see, e.g., U.S. Dept. of State, Current Model Open Skies Agreement Text (Apr. 13, 2004), [http://www.state.gov/e/eeb/rls/othr/2008/19514.htm](http://www.state.gov/e/eeb/rls/othr/2008/19514.htm) [hereinafter U.S. Model Open Skies ASA].

82 See Abeyratne, *supra* note 18, at 124.
tween the United States and individual EU member-states. The agreement is designed to open the EU-U.S. market to greater competition to foster growth and lower fares.

E. Dispute Resolution

The frequent collision of commerce, culture, and politics figures prominently in international civil aviation. Accordingly, in this setting disputes are to be anticipated. Parties to international aviation disputes have, for the most part, been able to resolve these disputes through negotiation. When negotiation fails, parties may seek resolution through the provisions of ASAs between member-states, dispute mechanisms provided for by the Convention through the ICAO, or adjudication before the International Court of Justice (ICJ).

Modern ASAs typically provide means for dispute resolution beyond negotiation between the parties. U.S. ASAs, for instance, provide that the parties to a dispute arising under the agreement may engage in binding arbitration through an ad hoc tribunal if consultations between the parties fail. Recognizing the cost of arbitration, the ICAO has provided a model clause for ASAs. According to the model clause, the parties to an unresolved dispute agree to submit to mediation—presided over by a panel of experts selected from a registry maintained by the ICAO—and to be bound by the panel’s decision. Because countries are the signatories of ASAs, disputes nominally occur between signatory states. In practice, however, disputes may arise between airlines or an airline and a foreign airport or government.

Article 84 of the Convention establishes a mechanism to resolve disputes between member-states over interpretation of the Convention or its annexes. Article 84 provides: “If any disagreement between two

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84 Id.
85 Dempsey, supra note 57, at 233.
86 Id.
87 Id. at 234.
88 Id. at 233.
89 Id. at 240–41.
90 U.S. Model Open Skies ASA, supra note 81, art. 14.
91 Dempsey, supra note 57, at 243.
92 Id.
93 Id.
94 Id.
95 Id.
96 Chicago Convention, supra note 22, art. 84.
or more contracting States relating to the interpretation or application of this Convention and its Annexes cannot be settled by negotiation, it shall, on the application of any State concerned in the disagreement, be decided by the Council.” No member of the Council may vote on any dispute to which it is a party, and either party may appeal the decision of the Council to an ad hoc tribunal or to the ICJ. Only five disputes have been submitted to the Council for judicial resolution, and the Council has not decided any of these disputes on the merits.

An environmental regulation dispute heard by the ICAO, between the United States and member-states of the E.U., elucidates the contours of dispute resolution in the ICAO. Concerned about the effect of engine noise on highly populated areas surrounding airports, the EU adopted engine noise standards stricter than the noise specifications contained in Annex 16 to the Convention. Rather than purchasing new aircraft, many airlines complied with the stricter standards by retrofitting aircraft engines with “hushkits” that dampened engine noise. EU member-states were not satisfied with this mode of compliance, as the hushkitted older planes were not as quiet as the new aircraft built to meet the stricter standards. In response, the EU reworked its noise regulations to reflect a certain parameter of engine performance rather than an absolute decibel level.

Carriers who had invested in hushkitting older planes, rather than replacing them with newer aircraft, risked a severe loss under the new standard. Accordingly, the U.S. carrier Northwest Airlines, that’s fleet largely consisted of aging, hushkitted aircraft, filed a complaint with the U.S. Department of Transportation against the fifteen EU member-states. The United States in turn filed a complaint under Article 84 of the Chicago Convention against the fifteen states on March 14, 2000. Prior to this action, the Council had only heard disputes regarding airspace restrictions.

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96 Id.
97 Id.
98 Dempsey, supra note 57, at 270–71.
99 Id. at 277–86 (providing a summary and analysis of the U.S-EU “hushkit” dispute).
100 Id. at 278.
101 Id. at 279.
102 Id.
103 Id. at 279–80.
104 Dempsey, supra note 57, at 280.
105 Id. at 280–81.
106 Id. at 281.
107 Id. at 278.
The EU filed preliminary objections to the U.S. action, arguing that the action was premature because the parties had failed to engage in adequate negotiations, the United States failed to exhaust local remedies, and the scope of the relief requested exceeded the authority of the ICAO.\textsuperscript{108} Each party submitted a brief and gave oral arguments, and the Council in turn voted 26-0 in favor of the United States on the preliminary objections.\textsuperscript{109} The parties accepted the Council’s invitation in its decision to engage in negotiations to settle the dispute.\textsuperscript{110} Then president of the ICAO, Dr. Assad Kotaite, assisted the parties in their discussions.\textsuperscript{111} In October of 2001, the parties reached a preliminary agreement under which the United States would withdraw its ICAO complaint and the EU would repeal the engine parameter noise regulation; the parties finally settled the dispute on December 6, 2003.\textsuperscript{112}

This dispute highlights the institutional priorities of the ICAO dispute resolution system.\textsuperscript{113} Had the Council reached a decision on the merits, it might have provided valuable guidance on the open question of whether ICAO environmental standards are the maximum which may be imposed by member-states or a minimum upon which member-states may build.\textsuperscript{114} However, the Council’s preference to assist in a consensual settlement rather than decide the dispute on the merits suggests that the Council places a higher priority on ending disputes short of formal adjudication.\textsuperscript{115}

Despite the ICJ’s contributions to international law, few states accede to the jurisdiction of the court.\textsuperscript{116} Of the twelve aviation disputes that have been brought before the ICJ, the court found it had jurisdiction in only two cases and only once reached the merits of the case.\textsuperscript{117}

\textsuperscript{108} \textit{Id}. at 282–83.
\textsuperscript{109} \textit{Id}. at 283.
\textsuperscript{110} Dempsey, \textit{supra} note 57, at 285.
\textsuperscript{111} \textit{Id}.
\textsuperscript{112} \textit{Id}.
\textsuperscript{113} See \textit{id}. at 304 (noting that despite its broad adjudicatory powers, the ICAO Council has demonstrated a preference for resolving disputes through assisted negotiation short of formal adjudication).
\textsuperscript{114} \textit{Id}. at 286.
\textsuperscript{115} See \textit{id}. at 304.
\textsuperscript{116} Dempsey, \textit{supra} note 57, at 286–87.
\textsuperscript{117} \textit{Id}. at 287.
II. THE PROPOSED DIRECTIVE

A. The EU ETS

The proposal by the EC, the executive body of the EU, to include aviation within the EU ETS emerged from a sequence of events catalyzed by the Kyoto Conference of the United Nations Framework Convention on Climate Change.118 As signatories to the Kyoto Protocol, the EU and its member-states obligated themselves to make measurable greenhouse gas emissions reductions.119 EU environmental legislation has traditionally taken the form of command-and-control regulation.120 Since the early 1990s though, there has been a growing interest in the EU in transitioning to market-based regulatory mechanisms, in large part due to the American experience with such regulation.121 Confidence in emissions trading systems increased in the debate following Kyoto, as member states discussed low-cost means to attain the emissions reductions mandated by the Protocol.122

The ETS is an essential element of EU climate change policy and a key mechanism through which the EU aims to meet its Kyoto obligations.123 Under the scheme, member-states allocate emissions allowances to emitters covered by the ETS.124 Member-states cap the number of allowances, creating a market for carbon allowances.125 Those emitting under their allotment may sell their surplus allowances, and emit-

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119 Lefevere, supra note 7, at 77.
120 Id. at 81.

Command-and-control systems are generally programs of centralized regulatory commands issued in excruciating detail via permits to pollution dischargers throughout a jurisdiction in order to implement environmental goals. Clean Air and Clean Water Acts permits issued by state agencies and EPA are archetypical command-and-control mechanisms, defining pollution standards in general and in very specific terms, and seeing that they are applied discharge by discharge.

121 Lefevere, supra note 7, at 82–83.
123 CRS ETS REPORT, supra note 8, at 1.
125 Id.
ters emitting beyond their allotment may purchase excess allowances. The EC employed a phased implementation of the scheme to allow for periodic review of system strengths and weaknesses. Phase I began on January 1, 2005, and is limited to CO$_2$ emissions from industrial installations in the energy, metal production, mineral, and paper industries, which account for approximately forty-five percent of EU CO$_2$ emissions. Successive phases will expand the scheme to cover more greenhouse gases and industries while progressively tightening emissions caps. Phase II is set to coincide with the first Kyoto Protocol commitment period, from 2008 to 2012.

EU member-states construct National Allocation Plans to distribute emissions credits to units covered by the ETS. The EC then reviews the allocation plans made by member-states. During Phase I, the EC required that each state’s allocation plan moved it toward its Kyoto commitment. In Phase II, the EC will require that each state’s allocation plan strictly complies with its Kyoto Protocol obligations.

B. The Proposed Directive Itself

1. Mechanics of the Proposed Directive

The EC announced that the Proposed Directive would include aviation within the ETS on December 20, 2006. The Proposed Directive would amend the existing EC directive by establishing that aviation would be a covered industry under the ETS. Flights between EU airports will be included within the ETS by 2011. The ETS will extend to all flights arriving at EU airports from outside the region or departing from EU airports headed outside the region by 2012.

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126 Id.
127 EC ETS Brochure, supra note 9, at 6.
128 Id. at 7.
129 CRS ETS Report, supra note 8, at 13; EC ETS Brochure, supra note 9, at 6.
130 CRS ETS Report, supra note 8, at 2.
131 Id. at 4.
132 Id.
133 Id.
134 Id.
136 Id. at 3.
137 Id. at 6.
138 Id.
terests of brevity and clarity, the latter group of flights will be referred to as “international” for the remainder of this Note.139

The Proposed Directive establishes individual airlines as the points of regulation.140 Allowance allocation will occur at the EU-level, unlike the current ETS where allocation occurs at the member-state-level.141 The EC will determine the total number of allowances to be distributed by average aviation emissions data from 2004 to 2006.142 For aviation operators licensed in the EU, the Proposed Directive assigns monitoring and compliance responsibilities to the EU member-state in which each airline is licensed.143 For non-EU aviation operators, the regulation assigns these responsibilities to the EU member-state in which each airline emits the largest quantity of CO₂.144 The Proposed Directive would integrate the airlines into the prior-existing ETS market so that the airlines could buy and sell allowances across industries.145

2. Rationale for Including Aviation in the ETS

Neither domestic nor international aviation emissions are currently included in the ETS.146 While the Kyoto Protocol includes domestic aviation greenhouse gas emissions within the reduction targets for developed countries, it delegates responsibility to the ICAO to guide efforts to achieve international aviation emissions reductions.147 While the inclusion of domestic aviation into the ETS for member-states is a partial solution to the emissions problem, the EC posits that any meaningful emissions reduction measures must also include international aviation because it accounts for the vast majority of EU flights.148 While aviation accounts for only 3% of EU greenhouse gas emissions, the EC projects that by 2012, emissions from international aviation

139 While flights between EU member-states are technically “international” flights, they are subject to uniform EU regulation because they depart from and land within the region. This Note primarily focuses on the implications of the extension of the ETS to “international” flights, those arriving at an EU airport from outside the region or departing from an EU airport headed outside the region.
141 Id.
142 Id.
143 Id. art. 18a(1)(a), at 19–20.
144 Id. art. 18a(1)(b), at 20.
145 Id. at 7.
146 See EC ETS BROCHURE, supra note 9, at 7 (noting that Phase I of the ETS is limited to CO₂ emissions from industrial installations in the energy, metal production, mineral, and paper industries).
147 Kyoto Protocol, supra note 60, art. 2.2.
148 EC Communication on Reducing the Climate Change Impact of Aviation, supra note 13, at 2.
flights would increase by 150% from 1990 levels. Growth at this rate would offset greater than 25% of EU Kyoto Protocol reductions. The EC acknowledges the role that the Kyoto Protocol assigned to the ICAO in working toward international aviation emissions. EU member-states continue to cooperate with ongoing ICAO work on such emissions. The Commission has concluded, however, that comprehensive action in a new direction is required to effectively achieve international aviation emissions reductions.

The EC anticipates that bringing aviation within the ETS will exert sufficient pressure on the industry to mitigate its adverse environmental impact. Supporters of the regulation project that it will provide enhanced incentive for airlines to invest in developing more efficient technology. In turn, the inclusion of aviation in the ETS will strengthen the carbon market, as air service providers will be able to buy and sell emissions allowances across industries.

III. POLITICAL, TECHNICAL, AND LEGAL IMPLICATIONS OF THE PROPOSED DIRECTIVE

The Proposed Directive’s inclusion of international aviation in the ETS raises political, technical, and legal issues associated with the regulation. While a variety of interests throughout the world have shown strong support for the regulation, aviation interests outside of the EU, particularly in the United States, have objected to the planned inclusion of international aviation. Fundamentally, critics of the regulation are concerned that it amounts to unilateral action directed at a global problem which requires, for a number of reasons, a multilateral solution. This concern informs political, technical, and legal critiques of the Proposed Directive.

149 Id.
150 Id.
151 Id. at 4.
152 Id. at 5.
153 Id.
154 CAIRNS & NEWSON, supra note 124, at 70.
155 Id.
156 Id.
157 See discussion infra Part III.A–C. The analysis in this Part is limited to the implications of including international aviation in the ETS.
158 See Pilling & Thompson, supra note 14 and accompanying text.
160 See id.
A. Political Implications

The primary political issue at stake is the identity of the appropriate regulatory body entrusted to pursue emissions mitigation measures in international aviation.\textsuperscript{161} Airlines, trade groups, and governments outside of the EU are skeptical as to whether the EC is the appropriate body to pursue emissions reductions in international aviation.\textsuperscript{162} They argue that the climate change effects of international aviation emissions present a global problem requiring a global solution.\textsuperscript{163} Accordingly, these proponents advocate that the ICAO and the existing international aviation regulatory framework is the appropriate forum in which to pursue international aviation emissions reductions.\textsuperscript{164}

Further, non-EU aviation representatives argue that the Proposed Directive inappropriately would force the EU’s preferred brand of climate change policy on other regions of the world.\textsuperscript{165} These interests argue that the Proposed Directive ignores the fact that countries’ individual political and economic climates determine the shape of effective regulation.\textsuperscript{166} Developing countries, in particular, have argued that extension of the ETS to international aviation interferes with their pursuit of a number of other emissions reduction measures that are more suited to their regulatory agendas.\textsuperscript{167}


\textsuperscript{162} See Kim Rahn, Korea Faces EU Emissions Rule, KOREA TIMES, Feb. 8, 2007, available at 2007 WLNR 2571034 (noting the South Korean government’s formation of a task force out of concern for the impact of the Proposed Directive on Korean airlines and the government’s intention to cooperate with non-EU opposition to the Proposed Directive); ATA Statement Regarding EC Emissions Trading, supra note 161 (noting the opposition of the Air Transport Association, which represents the U.S. aviation providers responsible for more than ninety percent of U.S. cargo and passenger traffic).

\textsuperscript{163} See IPCC Report, Aviation and the Global Atmosphere, supra note 1, at 3 (“Because carbon dioxide has a long atmospheric residence time (=100 years) and so becomes well mixed throughout the atmosphere, the effects of its emissions from aircraft are indistinguishable from the same quantity of carbon dioxide emitted by any other source.”); U.S.-EU Mission Open Skies Press Release, supra note 15 (“It is the antithesis of a global solution that we need through the International Civil Aviation Organization to address a global problem, namely the issue of aviation emissions.” (quoting DAS Byerly)).


\textsuperscript{166} See id.

\textsuperscript{167} Pilling & Thompson, supra note 14. The authors note the Asian airline view that:
B. Technical Implications

The technical design of the Proposed Directive’s inclusion of international aviation in the ETS raises concerns among opponents of the regulation. Design concerns include criticism of the choice of regulatory instrument, emissions credit allocation, compliance and enforcement measures, and system coverage. These concerns are discussed briefly below as they relate to the political and legal issues discussed herein.

Critics of the Proposed Directive’s inclusion of international aviation in the ETS have questioned the selection of emissions trading to pursue international aviation emissions reductions. U.S. aviation representatives believe that the international aviation industry first should pursue an overhaul of the air traffic management (ATM) system to realize emissions reductions more quickly and at a lower cost. Under this approach, ATM directors might achieve emissions reductions by changing taxiing and flight patterns of aircraft in inter-
national aviation. These interests argue that extension of the ETS to international aviation discourages governments from improving ATM efficiency. Critics of the Proposed Directive also have argued that emissions trading will not provide the incentive to improve fuel efficiency anticipated by the EC. They contend that a number of concerns, including weak economies and security issues, have forced international aviation to become a highly efficient industry that closely accounts for all costs, especially those attributable to fuel.

Related to trading, the emissions credit allocation used in the Proposed Directive has raised concerns. The Proposed Directive contemplates initially auctioning a small amount of emissions credits and distributing the majority of emissions credits to air service providers at no cost calculated by prior emissions. Critics of the regulation have argued that airlines that receive free emissions credits may pass the cost directly to consumers and thus realize windfall profits. According to these critics, this windfall would undercut the credibility of emissions trading as a serious climate change harm-mitigation measure. Aviation representatives also have expressed concern that the lack of a committed number of emissions credits set aside for startup airlines would hinder entrance to the market while favoring incumbent airlines.

The monitoring and compliance scheme for non-EU carriers might also raise concerns. The Proposed Directive assigns monitoring and compliance responsibilities for non-EU airlines to the EU member-state in which each airline emits the largest quantity of CO2. Accordingly, under this scheme an administering state would be responsible for ensuring compliance with the ETS for its own airlines and

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174 Id.
176 Id.
179 See WWF Press Release, supra note 177.
180 Id.
182 See Proposed Directive, supra note 11, art. 18a(1) (b), at 20 (assigning monitoring and compliance responsibilities for non-EU carriers to the EU member-state in which each airline emits the largest quantity of CO2).
183 Id.
presumably their biggest international competitors. Non-EU aviation interests might criticize this arrangement, questioning its inherent fairness while noting the administering state’s temptation to engage in protectionist enforcement to the detriment of non-EU operators.

Commentators in and outside of the EU have criticized the scope of coverage of the Proposed Directive, fearing market distortions. Representatives of EU aviation interests have expressed concern that the Proposed Directive, even after the inclusion of international flights, will place an increased burden on airlines operating in the EU to the benefit of carriers outside of the EU. Air service providers have warned that they may consider rerouting their services to elude the reach of the ETS. In the EU, the German carrier Lufthansa has threatened to relocate to Zurich, Switzerland—a non-EU state—to sidestep the ETS if the Proposed Directive takes effect. Non-EU operators, such as Asian carriers, may use hubs in other regions for flights that previously would have gone through the EU.

C. Legal Implications

Concern about the political and technical implications of the Proposed Directive’s inclusion of international aviation in the ETS informs legal critiques of the regulation. EU aviation representatives argue that the Proposed Directive is within the EC’s authority under the existing international aviation regulatory framework. EU proponents of the Proposed Directive liken the extension of the ETS to international aviation to admission and departure requirements permitted under the

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184 See id.


186 See Aimee Turner, Lufthansa Threatens to Move to Zurich to Evade Green Plan, Flight Int’l, Feb. 20, 2007, at 6 [hereinafter Turner, Lufthansa Threatens to Move to Zurich to Evade Green Plan]; U.S.-EU Mission Open Skies Press Release, supra note 15 (“We’re are also concerned that the Commission proposal would lead to market distortion . . . .”).

187 Turner, Lufthansa Threatens to Move to Zurich to Evade Green Plan, supra note 186, at 6.

188 Id.

189 Id.


191 See id. at 8 (“These proposals, if they include international aviation, do not have much chance of standing an international legal challenge. The objective of reducing aviation’s environmental footprint is not a point of big disagreement the question is how to do it.” (quoting Andrew Steinberg, U.S. Assistant Secretary of Transportation)).

192 CE REPORT, supra note 170, at 175–81.
Chicago Convention and ASAs.\textsuperscript{193} Article 1 of the Chicago Convention provides that each signatory state has exclusive sovereignty over the airspace above its territory.\textsuperscript{194} Article 6 provides that no scheduled air service may occur above each signatory state without prior authorization, according to the terms of the signatory state.\textsuperscript{195} Under Article 11, signatory states may apply admission and departure requirements to aircraft in international aviation entering or leaving the state so long as they are applied without distinction as to nationality and conform with the provisions of the Chicago Convention.\textsuperscript{196} EU aviation representatives argue that, taken together, these provisions support the route-based extension of the ETS to international aviation according to either the point of departure or arrival.\textsuperscript{197}

EU aviation representatives further argue that extending the ETS to international aviation accords with the Chicago Convention and ICAO guidance on emissions-mitigation measures.\textsuperscript{198} The Kyoto Protocol requires that signatory states, including all EU member-states, pursue international aviation emissions reductions through the ICAO.\textsuperscript{199} The EC notes that the ICAO CAEP, at its September 2004 meeting, declined to issue a legal instrument to coordinate emissions trading through ICAO.\textsuperscript{200} \textit{ICAO Assembly Resolution 35-5}, issued in October, 2004, in part, endorses an open emissions trading system for international aviation and contemplates either an ICAO-supported voluntary trading system or the extension of ICAO member-states’ trading systems to international aviation.\textsuperscript{201} Proponents of the Proposed Directive read this guidance as endorsing the extension of the ETS to international aviation.\textsuperscript{202} While the majority of ICAO member-states agreed at the ICAO Assembly’s September 2007 meeting that member-states should not apply an emissions trading system to other states’ aircraft operators except on the basis of mutual agreement, the EU states entered a formal reservation, arguing that no provision in the Chicago

\begin{footnotesize}
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  \item \textsuperscript{193} Id. at 176.
  \item \textsuperscript{194} Chicago Convention, supra note 22, art. 1.
  \item \textsuperscript{195} Id. art. 6.
  \item \textsuperscript{196} Id. art. 11.
  \item \textsuperscript{198} CE REPORT, supra note 170, at 178.
  \item \textsuperscript{199} Kyoto Protocol, supra note 60, art. 2.2.
  \item \textsuperscript{200} Proposed Directive, supra note 11, at 3.
  \item \textsuperscript{201} ICAO Assemb. Res. A35-5, supra note 62, at I-48.
  \item \textsuperscript{202} CE REPORT, supra note 170, at 178.
\end{itemize}
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Convention required a state to seek mutual consent prior to application of market-based measures.  

Opponents of the Proposed Directive, however, may scrutinize the regulation under the Chicago Convention, ASAs, and general principles of international law. These detractors might argue that that Proposed Directive amounts to an impermissible operating requirement, tax, or charge, or, alternatively, that the EC lacks jurisdiction to prescribe emissions regulation to operators in international aviation.

1. Impermissible Operating Requirement Argument

Opponents of the Proposed Directive may argue that the regulation would impermissibly regulate aircraft operation in contravention of the Chicago Convention or ASAs. Article 12 of the Chicago Convention requires that aircraft of each signatory state comply with the rules relating to “flight and maneuver” of the states in which they are operating. Article 12 further provides, “Over the high seas, the rules in force shall be those established under this Convention.” Article 11 of the U.S. Model Open Skies Agreement provides:

[N]either Party shall unilaterally limit the volume of traffic, frequency or regularity of service, or the aircraft type or types operated by the designated airlines of the other Party, except as may be required for customs, technical, operational, or environmental reasons under uniform conditions consistent with Article 15 of the Convention.

203 Jeffrey N. Shane, Undersecretary of Transportation for Policy, Remarks at the American Bar Association Forum on Air & Space (Oct. 4, 2007), available at 2007 WLNR 19707583.


205 See discussion infra Part III.C.1–3.

206 See Chicago Convention, supra note 22, art. 12; U.S. Model Open Skies ASA, supra note 81, art. 11.

207 Chicago Convention, supra note 22, art. 12. The source states:

Each contracting State undertakes to adopt measures to insure that every aircraft flying over or maneuvering within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and maneuver of aircraft there in force.

Id.

208 Id.

In light of these provisions, opponents of the Proposed Directive might argue that it violates Article 12 of the Chicago Convention because it would impose operating requirements on aircraft in international aviation over the high seas.\(^{210}\) Alternatively, they might argue that the regulation would violate the above provisions of ASAs prohibiting the unilateral imposition of operating requirements on aircraft in international aviation.\(^{211}\)

The critical issue under such challenges would be whether the Proposed Directive’s inclusion of international aviation in the ETS amounts to aircraft operation regulation.\(^{212}\) EU aviation representatives contend that including international aviation in the ETS would only impose admission and departure requirements permissible under the Chicago Convention and ASAs;\(^{213}\) they argue that any change in aircraft operation would result from a conscious business decision by the aviation provider.\(^{214}\) Skeptics of the regulation also might assert that the EC fundamentally intended the Proposed Directive to affect aircraft operation.\(^{215}\) A cap-and-trade emissions system operates on the regulated entities by creating incentives and consequences for engaging in a regulated activity.\(^{216}\) For instance, in contemplating the effect of extending the ETS to developing countries that’s airlines may have older, less efficient aircraft, the EC noted that such airlines could consider using their most efficient planes to serve the EU to lessen the impact of the ETS.\(^{217}\)

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\(^{210}\) See Chicago Convention, supra note 22, art. 12.
\(^{211}\) See U.S. Model Open Skies ASA, supra note 81, art. 11.
\(^{212}\) See CE REPORT, supra note 170, at 176 (arguing that the ETS would not amount to operation regulation).
\(^{213}\) Id.
\(^{214}\) See id. at 180.
\(^{215}\) Michael B. Jennison, Address at the International Air Transport Association (IATA) Legal Seminar in Istanbul, Turkey: Some Points on Aviation Emissions Regulation (Feb. 2007) (on file with Boston College Environmental Affairs Law Review). Jennison states:

> A sharp lawyer might argue that an emissions trading system, however, does not limit the volume of traffic, frequency or regularity of service, or types of aircraft operated. Rather, he or she might say that any such effects of an ETS would have resulted from the independent business decisions of the operators. This would be plainly disingenuous, however. If a regulatory tool that is designed to suppress aviation (by increasing its costs, to serve a greater global good) has the effect of suppressing aviation, how can this be considered an unintended consequence? Surely a government intervention in the market that induces operators to make decisions that result in reduced service or choice of equipment can be considered to intend that result.

\(^{216}\) CAIRNS & NEWSON, supra note 124, at 70.
\(^{217}\) EC ETS Impact Assessment, supra note 197, at 52.
Opponents of the Proposed Directive might argue that this demonstrates a clear intent to impose operation regulation on aircraft in violation of either Article 12 of the Chicago Convention or ASAs.\(^\text{218}\) It is reasonable to expect that the effect of the ETS on aircraft operation would become more dramatic as successive phases of the ETS featured more stringent emissions standards, as contemplated by the EC.\(^\text{219}\)

Further, the nature of the regulated activity, CO\(_2\) emission, may suggest that the EC proposal would impermissibly regulate aircraft operation over the high seas.\(^\text{220}\) After 2012, the ETS would cover, for example, an American flight departing New York bound for Paris.\(^\text{221}\) The majority of the regulated activity would occur outside of the EU, over the high seas. Accordingly, critics of the regulation may argue that it impermissibly amounts to another layer of operation regulation in an area in which the Chicago Convention has reserved rulemaking authority to itself.\(^\text{222}\)

2. Impermissible Charge or Tax Argument

Non-EU aviation interests might challenge the Proposed Directive’s inclusion of international aviation in the ETS as an impermissible charge or tax under the Chicago Convention or ASAs.\(^\text{223}\) Article 15 of the Chicago Convention allows aviation facilities and services providers to assess charges to recover their costs.\(^\text{224}\) Subsequent ICAO guidance elaborates on Article 15 and suggests that charges should not exceed the identifiable costs of facilities or services provided.\(^\text{225}\) Article 10 of the U.S. Model Open Skies Agreement echoes the close correlation between user charges and actual costs incurred by facilities and services providers, and requires that charges be related to costs makes this cor-

\(^{218}\) See Jennison, \textit{supra} note 215 and accompanying text.

\(^{219}\) See CRS ETS REPORT, \textit{supra} note 8, at 13.

\(^{220}\) See Chicago Convention, \textit{supra} note 22, art. 12.

\(^{221}\) See \textit{ Proposed Directive}, \textit{supra} note 11, at 6.

\(^{222}\) See Chicago Convention, \textit{supra} note 22, art. 12.

\(^{223}\) See Press Release, James L. Connaughton, Chairman of the White House Council on Envtl. Quality, The President’s Comprehensive Climate Strategy and the Clean Coal Initiative (Nov. 30, 2006), \textit{available at} http://fpc.state.gov/fpc/77170.htm [hereinafter Connaughton Press Release] (arguing that the ETS would amount to a tax on international aviation); FAA/EC Roundtable Press Release, \textit{supra} note 165 (noting that there are a number of unresolved legal issues surrounding whether the ETS might be interpreted as a charge on international aviation).

\(^{224}\) Chicago Convention, \textit{supra} note 22, art. 15.

\(^{225}\) \textit{ICAO Policies on Charges}, \textit{supra} note 43, at 3, 12.
relation mandatory. Article 15 of the Chicago Convention also prohibits the imposition of a charge based solely on a right of transit, exit, or entry.

Mindful of these provisions, opponents of the Proposed Directive might argue that extension of the ETS to international aviation imposes an impermissible charge that exceeds any identifiable cost under Article 15 of the Chicago Convention, elaborated upon by subsequent nonbinding guidance, or ASAs. Alternatively, critics might argue that the ETS amounts to an impermissible charge based solely on the right of entry or exit under Article 15 of the Chicago Convention.

Non-EU aviation interests may also claim that the extension of the ETS to international aviation amounts to an impermissible tax under the Chicago Convention or ASAs. Article 24 exempts fuel arriving on board from a “customs duty” and other charges. Subsequent ICAO guidance on taxation suggests that this exemption extends to “import, export, excise, sales, consumption and internal duties and taxes of all kinds levied upon the fuel.” Further, Article 9 of the U.S. Model Open Skies Agreement contains a reciprocal exemption from national taxes on fuel on aircraft in international aviation. Accordingly, opponents of the Proposed Directive might argue that extension of the ETS to international aviation would amount to an impermissible tax on fuel in international aviation under the Chicago Convention or ASAs because it would effectively impose a cost on aviation operators as a function of fuel consumption.

The plausibility of these challenges would turn on whether the ETS could be distinguished from a charge or tax. EU aviation representatives argue that emissions trading is contemplated by neither the Chi-
Chicago Convention nor ASAs and that it is distinct from a charge or tax.\textsuperscript{235} Non-EU aviation interests would likely rebut that the extension of the ETS to international aviation would amount to a charge or tax because it would unilaterally impose costs on aviation operators.\textsuperscript{236}

3. Jurisdiction to Prescribe Argument

Apart from the existing international aviation regulatory framework, opponents of the Proposed Directive may challenge whether the EC or EU member-states have jurisdiction to prescribe CO\textsubscript{2} emissions regulation extraterritorially.\textsuperscript{237} The Restatement (Third) of Foreign Relations Law of the United States (Restatement) reflects modern international law’s treatment of a state’s jurisdiction to prescribe extraterritorial regulation.\textsuperscript{238} Section 402(1)(c) of the Restatement provides that a state has jurisdiction to prescribe law with respect to “conduct outside its territory that has or is intended to have substantial effect within its territory.”\textsuperscript{239} Section 403(1) provides, “Even when one of the bases of jurisdiction under § 402 is present, a state may not exercise jurisdiction to prescribe law with respect to a person or activity having connections with another state when the exercise of such jurisdiction is unreasonable.”\textsuperscript{240} Section 403(2) elaborates on the factors used to determine whether exercise of jurisdiction is unreasonable, including:

(a) the link of the activity to the territory of the regulating state, i.e., the extent to which the activity takes place within the territory, or has substantial, direct, and foreseeable effect upon or in the territory;

(b) the connections, such as nationality, residence, or economic activity, between the regulating state and the person principally responsible for the activity to be regulated, or between that state and those whom the regulation is designed to protect;

\textsuperscript{235} CE Report, supra note 170, at 175–77.

\textsuperscript{236} See Jennison, supra note 215 (“To the extent that a unilateral scheme imposes costs, limits a carrier’s operations or both, it is the functional equivalent of a levy that is not related to the costs or providing any aeronautical facilities or services.”).

\textsuperscript{237} See id.


\textsuperscript{239} Restatement (Third) of Foreign Relations Law of the United States § 402(1)(c).

\textsuperscript{240} Id. § 403(1).
(c) the character of the activity to be regulated, the importance of regulation to the regulating state, the extent to which other states regulate such activities, and the degree to which the desirability of such regulation is generally accepted;

(d) the existence of justified expectations that might be protected or hurt by the regulation;

(e) the importance of the regulation to the international political, legal, or economic system;

(f) the extent to which the regulation is consistent with the traditions of the international system;

(g) the extent to which another state may have an interest in regulating the activity; and

(h) the likelihood of conflict with regulation by another state.  

Opponents of the extension of the ETS to international aviation might argue that the EC lacks jurisdiction to prescribe CO$_2$ regulation extraterritorially because such regulation would be unsupported by a substantial effect in EU territory.  

Critics of the regulation might argue that non-EU carriers, serving the EU, engaged in international aviation primarily over the high seas and foreign countries do not produce a substantial effect in EU territory. Further, they might argue that aviation emissions, accounting for two percent of global CO$_2$ emissions, do not produce a substantial effect on the long-term impacts of climate change, the ultimate regulatory aim of the Proposed Directive.

Non-EU aviation interests would likely argue that even if the EC and EU member-states could show that international aviation emissions produced a substantial effect in the EU, it should refrain from exercising jurisdiction because doing so would be unreasonable. In light of sections 403(2)(a) and (c) of the Restatement, critics of the regulation might scrutinize the connection between the regulated activity and the regulating entity. They might argue that in extend-

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241 Id. § 403(2) (a)–(h).
242 See Jennison, supra note 215.
243 See id.
244 Proposed Directive, supra note 11, at 2 (noting that the objective of the Proposed Directive is to mitigate the climate change impact of aviation emissions); IPCC Report, Aviation and the Global Atmosphere, supra note 1, at 6 (noting that aviation accounts for two percent of global CO$_2$ emissions); Jennison, supra note 215.
245 See Restatement (Third) of Foreign Relations Law of the United States § 403(2)(a)–(h).
246 See id. § 403(2)(a), (c).
ing the ETS to international aviation, the EC would attempt to regulate an activity—CO₂ emission—that occurs largely in international territory and that yields a global rather than localized effect. Under section 403(2)(e), opponents might argue that the importance of international aviation to the world economy and its service of a critical, unique need counsel against unilateral, regional implementation of regulation that would drastically affect international aviation. Under section 403(f), critics might find that the Proposed Directive would be a radical departure from the traditions of international aviation regulation. Lastly, opponents might argue that according to sections 403(g) and (h) the Proposed Directive’s extension of the ETS to international aviation would be at odds with the efforts of the ICAO and its member-states in regulating aviation emissions.

States’ jurisdiction to prescribe extraterritorial regulation aimed at activities that affect climate change remains an open question. EU aviation interests would likely dispute whether the extension of the ETS to international aviation amounts to an extraterritorial application of EU law; rather, as noted above, they would likely argue that the Proposed Directive only imposes admission and departure requirements on aviation operators serving the EU. Notwithstanding this objection, if the Proposed Directive were recast as extraterritorially prescribing emissions regulation, EU aviation interests might argue that international aviation indeed produces a substantial effect within the EU, providing the basis for reasonable extraterritorial jurisdiction.

D. Potential Dispute Resolution Pathways

Opponents of the regulation may attempt to forestall implementation of the Proposed Directive through diplomatic channels, adjudication before the ICAO, dispute resolution under ASAs, or challenges in national courts. Supporters and opponents of the Proposed Directive

\[247\] See id.

\[248\] See id. § 403(2)(e).

\[249\] See id. § 403(f).

\[250\] See id. § 403(g)–(h).

\[251\] See Francesco Francioni, Extraterritorial Application of Environmental Law, in Extraterritorial Jurisdiction in Theory and Practice 122, 122 (Karl M. Meessen ed., 1996) (noting that extraterritorial application of environmental law is largely unexplored); Jennison, supra note 215.

\[252\] See CE Report, supra note 170, at 176.

\[253\] See Restatement (Third) of Foreign Relations Law of the United States §§ 402(1)(c), 403(2).

\[254\] See discussion infra notes 255–273.
will continue to evaluate the merits of each of these pathways while the European Parliament and Council consider the regulation in the codecision process.\textsuperscript{255}

Opponents of the Proposed Directive will continue to employ diplomatic efforts to prevent the extension of the ETS to international aviation.\textsuperscript{256} Aviation representatives in the U.S. government have stated that they will continue to work with their EU counterparts to ensure that the ETS is not extended to international aviation.\textsuperscript{257} Non-EU aviation representatives critical of the regulation continue to coordinate their resistance to the Proposed Directive.\textsuperscript{258} The ICAO provides a forum for diplomatic contact between supporters and critics of the regulation.

Opponents of the Proposed Directive might also seek redress under the provisions of ASAs.\textsuperscript{259} As discussed above, non-EU critics of the regulation might find that the proposed extension of the ETS to international aviation would contravene provisions of ASAs.\textsuperscript{260} Accordingly, these interests, whether airlines or government officials, might lobby the aggrieved state party to the agreement to initiate consultations, as provided by the ASA, with an EU member-state regarding interpretation of the agreement.\textsuperscript{261} If consultations fail to yield an understanding acceptable to both parties, either party may then refer the dispute to arbitration as provided by the ASA.\textsuperscript{262} Alternatively, opponents of the Proposed Directive’s extension of the ETS to international aviation might press a state party to consider retaliatory economic measures under the ASA.\textsuperscript{263}

Non-EU ICAO member-states may also challenge the Proposed Directive’s extension of the ETS to international aviation pursuant to Article 84 of the Chicago Convention.\textsuperscript{264} Comparing the opposition to the Proposed Directive to the Hushkit Dispute may offer insight into

\textsuperscript{256} See id.
\textsuperscript{257} Id.
\textsuperscript{258} Rahn, supra note 162 (noting the South Korean government’s intent to cooperate with the non-EU opposition to the Proposed Directive, including United States, China, Japan, Russia, and Australia).
\textsuperscript{260} See discussion supra Part III.C.
\textsuperscript{261} See U.S. Model Open Skies ASA, supra note 81, art. 13; Dempsey, supra note 57, at 243 (noting that although ASAs are nominally agreements between states, airlines may pressure their domestic government to enforce the agreement).
\textsuperscript{262} See U.S. Model Open Skies ASA, supra note 81, art. 14.
\textsuperscript{263} Jennison, supra note 215.
\textsuperscript{264} See Turner, USA Ready to Fight, supra note 190, at 8.
the nature of a potential challenge to the regulation in front of the ICAO Council.265 In the Hushkit Dispute, large financial stakes coupled with political and technical concerns informed and motivated a U.S. challenge under Article 84 against EU member-states to the implementation of environmental regulation.266 U.S. aviation representatives have noted that implementation of the Proposed Directive may prompt a similar U.S. response before the ICAO Council to block the extension of the ETS to international aviation.267 Further, where the Hushkit Dispute primarily concerned the United States and EU member-states, the Proposed Directive appears to have elicited broader international opposition to the regulation.268

The ICAO Council’s acceptance of the Hushkit Dispute marked an expansion of the Council’s exercise of jurisdiction into economic and environmental disputes.269 It is reasonable to expect that the Council might continue to exert itself in these areas affecting international aviation and entertain challenges to the Proposed Directive.270 The resolution of the Hushkit Dispute through assisted negotiation was consistent with the Council’s demonstrated preference to settle disputes short of formal adjudication, but it left as an open question the relation between ICAO member-state environmental regulation and the Convention and ICAO standards.271 If implemented, the Proposed Directive may afford the Council another opportunity to provide guidance on this matter.272 Any future reconsideration of this question would depend, however, on how the developing ICAO guidance on emissions trading in international aviation would relate to the EU regulation.273

266 See Dempsey, supra note 57, at 277–79.

Implementation of the proposal does promise a repeat, if it’s approved by the Council and the European Parliament and placed into law in the EU, it promises a repeat of the bitter fight several years ago over the unilateral EU “hushkits” proposal, the EU “hushkits” regulation. It was, in fact, a regulation the EU was eventually forced to withdraw, to repeal after legal proceedings were brought against Member States under the Chicago Convention.

Id.

268 Pilling & Thompson, supra note 14 and accompanying text.
269 Dempsey, supra note 57, at 278.
270 See id.
271 Id. at 286.
272 See id.
273 See Proposed Directive, supra note 11, at 3 (noting that the EC will reconsider ICAO guidance on emissions trading after it has been updated at the Assembly’s 2007 meeting).
IV. PURSuing International Aviation Emissions Reduction Measures Through the ICAO

The Proposed Directive embodies a progressive and timely regulatory intent to apply a novel regulatory mechanism to a specific manifestation of the climate change effects of a commercial activity, a problem that increasingly attracts global attention.274 Non-EU political, technical, and legal opposition to the Proposed Directive largely flows from the idea that extension of the ETS to international aviation amounts to an ill-advised and possibly impermissible unilateral action directed toward a global problem that requires a multilateral solution.275 Even in light of this critique, it is important to note that where multilateral action is desirable to address a global environmental problem, unilateral action often, in fact, provides the impetus that ultimately spurs global action.276 The Proposed Directive is motivated in part by a reasonable impatience among EU member-states with the pace of the development of multilateral international aviation emissions reduction measures.277 However, the formidable multidisciplinary concerns raised by the regulation counsel against extension of the ETS to international aviation.278 To preserve the regulatory momentum at the heart of the Proposed Directive and insulate it from likely protracted legal challenges, the EC should not include international aviation in the ETS; rather, international aviation emissions reductions should be aggressively pursued through the ICAO because it is responsive to the political, technical, and legal implications raised by the regulation.279

The ICAO is the politically appropriate body to direct development of international aviation emissions reduction measures. The Chicago Convention charges the ICAO with the task of achieving uniformity in international aviation regulation.280 The ICAO has expanded its role in environmental regulation from setting technical standards to contemplating complex, market-based measures that exist at the inter-

274 FAA/EC Roundtable Press Release, supra note 165 (noting the urgency in the EU, as manifest in the ETS, to act on climate change).
277 EC Communication on Reducing the Climate Change Impact of Aviation, supra note 13, at 5 (noting the difficulties of developing aviation emissions guidance through the ICAO and the subsequent need for EU action in a new direction).
278 See discussion supra Part III.A–C.
279 See discussion supra Part III.A–C.
280 See Chicago Convention, supra note 22, arts. 37, 44.
face of economic, technical, and international policy. Accordingly, the ICAO is the appropriate venue to work towards uniformity among member-states in such a complex regulatory arena. Further, as nearly all countries with international aviation operators are members of the ICAO, developing emissions reduction measures through the ICAO would increase participation from all primary international aviation stakeholders. ICAO-developed guidance should reduce the disenfranchisement and resentment that might follow from unilateral regional action with far-reaching effects, lessening the risk of noncompliance and retaliatory regulation that may otherwise follow.

The ICAO is best positioned to guide the technical design of an international aviation emissions reduction regime. As its regulatory role has expanded, the ICAO has developed unmatched multidisciplinary expertise through the solicitation of expert input in a number of fields affecting international aviation policy, including economics, engineering, and environmental science. This expertise should lend itself to full consideration of the technical issues related to the design of an international aviation emissions reduction regime and increase stakeholder confidence in the resultant system. Aviation representatives have criticized the impact assessment commissioned by the EC and relied upon in the Proposed Directive. EU aviation interests have argued that the study did not adequately account for the economic effects of extending the ETS to aviation. Non-EU interests have argued that the study gave insufficient consideration to the impacts of extending the ETS to international aviation felt outside of the EU. With its geographically diverse membership, the ICAO is well suited to take into account the economic, political, and technical circumstances of its

281 Maillett & Burleson, supra note 64, at 5.
282 See id.
284 See generally Pilling & Thompson, supra note 14 (noting the disappointment of the AAPA that Asian aviation interests were not consulted regarding the Proposed Directive and that the AAPA was rebuffed after attempting to engage the EC regarding the regulation).
285 See Miller, supra note 29, at 724–25 (noting that the ICAO’s technical expertise makes it well-suited to develop international aviation emissions measures).
286 Maillett & Burleson, supra note 64, at 5.
287 See id.
289 See id.
290 See id.
member-states in emissions reduction system design.\textsuperscript{291} This robust consideration of a variety of regulatory philosophies and mechanisms should address the equity concerns raised by member-states in developing regions.\textsuperscript{292} Lastly, development of an international aviation emissions reductions program through the ICAO may avoid the regulatory and market distortions that would likely follow from enactment of the Proposed Directive.\textsuperscript{293} Achieving a broader geographic coverage in an emissions reduction regime, even if it were to mean settling on less ambitious emissions standards, could result in a more effective system that avoids regional balkanization of regulation and market distortions.\textsuperscript{294}

Pursuing an international aviation emissions reduction regime through the ICAO could avoid legal challenges that appear likely if the Proposed Directive continues on its current path toward enactment.\textsuperscript{295} The fundamental tension underlying much of the opposition to the Proposed Directive—that it is an ill-advised unilateral action aimed at a global problem with dramatic effects felt abroad—incentivizes potential opponents of the regulation to interpret questionable provisions of relevant law as presenting legal obstacles to the extension of the ETS to international aviation.\textsuperscript{296} Non-EU aviation interests have indicated that legal action is likely if the regulation proceeds toward enactment.\textsuperscript{297} As a result, the legal status of the Proposed Directive under the existing international aviation regulatory framework and international law is uncertain until these legal disputes are either averted or resolved.\textsuperscript{298} Developing an international aviation emissions reduction system through the ICAO would allow adverse parties to work toward a common understanding of the meaning of contested provisions of the relevant law as they relate to aviation emissions reduction measures.\textsuperscript{299}

Skeptics of pursuing international aviation emissions reductions through the ICAO may argue that the ICAO has failed to act quickly enough.\textsuperscript{300} They might fear that aviation interests have used the ICAO

\textsuperscript{291} See Miller, supra note 29, at 728–29.
\textsuperscript{292} See id.
\textsuperscript{293} See id. at 726.
\textsuperscript{294} Jennison, supra note 215.
\textsuperscript{295} See Turner, USA Ready to Fight, supra note 190, at 8.
\textsuperscript{296} See Jennison, supra note 215.
\textsuperscript{297} See Turner, USA Ready to Fight, supra note 190, at 8.
\textsuperscript{298} See id.
\textsuperscript{299} See Jennison, supra note 215.
\textsuperscript{300} See EC Communication on Reducing the Climate Change Impact of Aviation, supra note 13, at 5.
to delay implementation of CO₂ emissions standards. To be sure, the ICAO has contemplated emissions reduction measures for a number of years and has yet to issue emissions guidance that would achieve the reductions contemplated by the Proposed Directive. However, the ICAO has worked diligently during this time through cooperation with member-state governments, multinational organizations, and in its own committees and working groups to develop the capability to account for the myriad concerns implicated in pursuing emissions reductions. The EU could provide a needed spur to the development of ICAO emissions guidance by extending the ETS to aviation in the EU among its member-states, as contemplated by the first phase of the Proposed Directive, and bringing concrete evidence of the implementation of emissions trading in aviation to bear on the ICAO process.

The ETS in general, and the Proposed Directive in particular, demonstrates that the EU is out in the forefront in pursuing CO₂ emissions reductions. Rather than jeopardize the regulatory momentum underlying the Proposed Directive, the EU should instead channel this inertia into holding the ICAO accountable for fulfilling the environmental duties it has assumed through rigorous pursuit of an international aviation emissions regime. The recent ICAO CAEP meeting, Colloquium, and Assembly meeting show that emissions reduction measures—particularly emissions trading—figure prominently in the regulatory consciousness of the ICAO and its member-states. Seizing upon this consciousness, and mindful of the ambitiousness of the Proposed Directive, the EU would stand poised to capitalize on a prime opportunity to ensure the institutional integrity and responsibility of the ICAO.

Conclusion

The international civil aviation regulatory framework, comprised of the Chicago Convention, ICAO, and bilateral air service agreements,
reaches nearly all matters related to international aviation. Reflecting increasing global concern over environmental quality, the ICAO has expanded the ambit of its regulatory activities from providing guidance on technical matters and airspace rights to include the contemplation of complex international environmental regulation.

The EC’s Proposed Directive would extend the ETS to civil aviation, first to airlines operating in the EU, and then to all international aviation operators serving the EU. The regulation would subject all airlines operating in the EU to CO₂ emissions caps and participation in the EU carbon market. EU representatives have argued that the Proposed Directive is congruent with international aviation emissions reduction efforts and is a consistent and necessary next step toward achieving meaningful emissions reductions.

Non-EU aviation interests have raised significant political, technical, and legal critiques of the Proposed Directive’s inclusion of international aviation in the ETS. Opposition to the regulation principally flows from the perception that the EU is acting unilaterally to address a global problem. Critics have questioned whether the EC is the politically appropriate regulatory body to ensure maximum efficiency and compliance. They have also questioned several technical design aspects of the regulation’s inclusion of international aviation in the ETS, including choice of regulatory instrument, emissions credit allocation, compliance and enforcement measures, and system coverage. These political and technical concerns may inform legal challenges under the Chicago Convention, bilateral air service agreements, or general provisions of international law to block the implementation of the Proposed Directive.

To preserve the regulatory inertia at the center of the Proposed Directive and avoid undue legal challenges, the EC should not include international aviation in the ETS, but should instead vigorously pursue international aviation emissions reductions through the ICAO. The ICAO is responsive to the political, technical, and legal issues raised by the Proposed Directive and is the appropriate forum for international aviation stakeholders to discern the characteristics of an appropriate and effective international aviation emissions reductions regime. EU interests might be reasonably impatient with the pace of emission reductions measures in the ICAO to date. However, these interests should channel their efforts toward holding the ICAO to the environmental responsibilities it has voluntarily accepted rather than fending off likely challenges that would result from unilateral action.