AN EVALUATION OF VOLUNTARY PROGRAMS AS PUBLIC POLICIES FOR ENVIRONMENTAL PROTECTION

by

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B.A., Physics
University of Virginia, 1990

Submitted to the Department of Civil and Environmental Engineering in Partial Fulfillment of the Requirements for the Degrees of

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Abstract

Since 1991, voluntary programs have proliferated within the regulatory agencies, particularly the Environmental Protection Agency (EPA). In the simplest description, voluntary programs call for a voluntary commitment on the part of a firm or commercial entity to take positive environmental actions, as defined by the program, in return for recognition and/or technical support from the regulatory agency. This work attempts to evaluate voluntary programs as public policies for environmental protection. Two sets of critical questions are asked:

- Where did voluntary programs come from? why now? why so many?
- In what situations, with what structures, and to what ends are voluntary programs appropriate or effective public policies for environmental protection

Voluntary programs are shown to represent a comprehensible outcome of a set of critiques of command-and-control approaches, partially addressing the first set of questions. This argument also serves to contextualize voluntary programs within the larger universe of environmental policy approaches.

The second set of questions necessitates developing frameworks for understanding the functioning and limitations of voluntary programs. Specifically, voluntary programs are critically concerned with and dependent upon the levers or inducements which they use to secure participation and create commitment. A model for understanding these levers is developed. The need to target aggregate, rather than uniform firm-level results is identified as an important limitation of voluntary programs.

Six case studies, representing a cross-section of voluntary programs administered at the headquarters level of the EPA are presented. These are used as a check on the utility of the frameworks and models developed in the previous chapters. The case studies, combined with the theoretical and analytical work, allow important results and considerations to be enumerated.

The sum of these results is as follows: Voluntary programs have the potential to effect significant changes in environmental behaviors, and can be effective policies for environmental protection. They often depend, however, on a strong enforcement role for the agency under its regulatory mandates, and thus must be a supplement, rather than a replacement for regulation. They raise a set of important questions for the regulatory agency, including considerations of equity, separation of enforcement and voluntary activities, and the nature of the expertise they require. They should not be seen as opportunities which allow firms to act altruistically, but rather as policies which act to change the calculus of cost and benefit in which firms engage.

Thesis Supervisor: John Ehrenfeld, Sc.D., Senior Research Associate, Center for Technology, Policy and Industrial Development
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I owe a larger intellectual debt to a number of instructors at MIT and Harvard from whom I have gained both tools for thinking about and, I hope, a deeper understanding of environmental issues. These individuals include Vicki Norberg-Bohm, Nicholas Ashford and Chuck Caldart, Nazli Choucri, Karen Polenske and Robert Stavins. (They should not, I hasten to add, share any blame for conceptual or methodological deficiencies in the argument this thesis develops.)

Last but most certainly not least, thanks and apologies to my housemates and friends who, with good humor — but I am sure, much against their will — have vicariously experienced a great deal of this thesis. And many, many thanks to Angelique, who was so often supportive when she would have been perfectly entitled to clobber me.
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INTRODUCTION

Over the past twenty-five years, the nation's environmental laws have grown in size, number and complexity. A large regulatory structure — concentrated in the Environmental Protection Agency, but with arms extending throughout the executive branch — has grown up to administer this body of statutory authority and the regulation which derives from it. The dominant "command and control" regulatory mode embodied in the laws has a structured a relationship between the regulated community and the agencies which many describe as adversarial.

Against this history, an increasingly popular assertion over at least the past five years has been that the "command and control paradigm" is inadequate to meet the current generation of environmental problems. Reasons for this attitude, so far as they may be attributed, are diverse. Certainly, the most obvious and visible environmental problems (e.g., factory smokestacks spewing dirty plumes and flammable rivers) have been brought to heel by command-and-control approaches. Further, the economic and political environment has changed significantly since the early 1970s. These two factors combine to reshape the context in which public policy on the environment is formed and mitigate against sweeping command-and-control approaches in at least the following ways:

- Concerns over American competitiveness combined with the appearance of good environmental health create a reluctance to impose costs of command-and-control regulation on industry;
- The environmental problems now at the top of the national agenda tend to complex, multimedia and arising out of diffuse sources — problems for which it is difficult to write regulation;
- Budget austerity at all levels of government make it difficult to create the bureaucratic resources to undertake the traditional regulate — monitor — enforcement action approach.

Such discussion begs the question: if not command and control, then what? There are those who advocate, for example, market approaches, in which government creates a market for the buying and selling of rights to pollute. The argument for this approach is that costs of pollution control are allocated in an economically efficient manner. (The argument against it is that buying the "right" to pollute is a fundamentally immoral act.) And there are many who advocate a new genre of interaction between the regulatory agencies and the regulated community: a partnership approach, in which government's role is to assist, guide and support industry in becoming "greener."

Market approaches have been embodied in law — most notably, in the tradable permits provisions for SO₂ in the Clean Air Act Amendments of 1990. Legislated partnership, however, would seem to be something much like an oxymoron. And indeed, the most tangible expressions of this approach have not been legislated. Among these are the so-called ' voluntary programs," which have proliferated since 1991 within the regulatory agencies.

In the simplest description, such programs call for a voluntary commitment on the part of a firm or commercial entity to take positive environmental actions in return for recognition and/or technical support from the regulatory agency. Nearly 30 of these programs now exist within the Environmental Protection Agency alone; more are announced all the time. They operate in diverse areas and in all media; they are praised on the one hand as harbingers of a new and more productive relationship between government and viewed as an abrogation of government responsibility for environmental protection on the other. As with most complex issues, neither extreme is likely to be an accurate universal characterization. What is certain is that their proliferation and the support they seem to enjoy at high policy-making levels requires that voluntary programs be examined as public policies for environmental protection.
This thesis attempts to make such an evaluation. This process is composed of several related threads. Structures for understanding and analyzing voluntary programs must be developed — without these, there are few ways that voluntary programs can be compared to one another, or to a theoretical base. The development and evolution of such frameworks in the text will give insight into a number of critical questions: in what situations, with what structures, and to what ends are voluntary programs appropriate public policies for environmental protection? And, importantly, where did they come from? why now? why so many? These frameworks and insights will then be applied to a series of case studies representing a cross-section of voluntary programs administered by the U.S. Environmental Protection Agency. This serves as a means to validate the theoretical frameworks which have been developed for understanding voluntary programs and provides further insights into conclusions about the worth, effectiveness and limits of voluntary programs as a policy approach.

This thesis focuses on voluntary programs (as defined above) administered at the headquarters level by the US Environmental Protection Agency. This is not intended to overlook similar programs at the regional, state, or local level. Rather, staying within one institutional context seemed the best way to achieve the balance of breadth and depth required within the time, resources and space available.
CHAPTER ONE: BUILDING A BASE FOR EVALUATION: DEFINING AND UNDERSTANDING PUBLIC ENVIRONMENTAL POLICIES

Why definition and understanding are necessary
This thesis is an examination and evaluation of voluntary programs as public policies for environmental protection. The emphasis in this sentence defines the orientation of this work and the terms upon which the evaluation shall be conducted.

A necessary first step is therefore to arrive at an understanding of what a "public policy for environmental protection" is. This should not be a superficial definition, but rather an understanding evolved out of broader conceptions of the interaction between economic systems, society, and the environment. Such an approach serves two important functions:

- It will allow the formulation of criteria for evaluating voluntary programs as public policies, and
- It will provide a foundation for (1) understanding the emergence of voluntary programs as public policy approaches and relating them to the large body of extant environmental policy, and (2) examining conditions under which and structures with which voluntary programs may be effective public policies.

Basic definitions of policy.
The American Heritage Dictionary defines "policy" as "a plan or course of action, as of a government, political party, or business, intended to influence and determine decisions, actions, and other matters." Kraft and Vig define a public policy as "a course of governmental action or inaction in response to social problems. It is expressed in goals articulated by political leaders; in formal statutes, rules and regulations; and in the practices of agencies and courts. . . [it] states an intent to achieve certain goals and objectives through a conscious choice of means." Both definitions are accurate and not incompatible; both must be narrowed and focused to achieve a definition against which (1) the notion of voluntary programs as public policies may be evaluated and (2) voluntary programs and other approaches to environmental protection may be characterized and mapped.

The best way to achieve this focus is to understand why there should be a need for environmental policies in the first place. Several overlapping explanations exist for such a need; all are rooted in the idea that "normal" behaviors of the individual or the firm — the fundamental units of economic action — will lead to environmental outcomes which society judges as undesirable. Why should there be a tension between normal behaviors and desirable environmental outcomes?

"Normal Behaviors" rooted in Agent-of-Capital Social Responsibility (ACSR)
This tension is rooted in the differences which exist between the kind of corporate social responsibility which historical market incentives and legal tradition have supported and the

1 Kraft and Vig, p. 5
2 The justification for government intervention is often stated as arising "out of an alleged inability of the marketplace to deal with particular structural problems" (Breyer, p. 17), such structural problems in the environmental area including externalities and imperfect information. This market-focused approach is a subset of the more general idea that needs for intervention arise when normal behaviors lead to undesirable environmental outcomes. Where behaviors remain outside the marketplace or where regulation exists to optimize rather than maximize social welfare (e.g., protecting a particular group of workers) (Ashford, p. 172), intervention under the more general rubric makes sense — but not under one based on the idea of correcting the marketplace.
sort of social responsibility many believe is required to produce desirable environmental outcomes. Following the terminology of Rodewald, and Browne and Giampetro, corporate behavior arising out of these historical market incentives and legal traditions constitutes the practice of "Agent-of-Capital Social Responsibility" (ACSR).

Agent-of-Capital Social Responsibility

"The social responsibility of business is to increase its profits."

Milton Friedman, in Issues in Business and Society, 168.

This quotation perhaps best exemplifies ACSR behavior, in which socially responsible action on the part of business is defined by "the pursuit of profits within the constraint set by the laws regulating business and the requirements of capitalist market morality." ACSR is rooted in the contractual obligation which exists between the managers of a corporation and its shareholders; the duty of managers is to maximize returns on shareholders' capital. 1

This contractual obligation forms the conceptual foundation of capitalism and is enforced by market realities and the structures of corporations, and affirmed by law:

McCabe, for example, takes pains to enumerate the many mechanisms which exist to place downward pressure on "agency costs" — the costs incurred by shareholders because they employ managers (agents) to oversee the operation of their capital rather than managing it themselves. These mechanisms include: controls built into the corporation's articles of association (e.g., independent auditing); the ultimate control retained by shareholders; market competition in product, labor and capital markets; creditor audits; and pressure on managers to produce profits as a condition for continued employment and promotion. 2

Given all this, McCabe concludes that with "the external and internal disciplinary mechanisms acting on managers to maximize efficiency and thereby constraining management diversion of corporate resources, there is little scope for CSR [corporate social responsibility]." 3 (Note that McCabe adopts a definition of CSR as a pursuit of social goals conflicting with profit maximization.) 4

As noted above, these structural tendencies are reinforced by legal restrictions on a corporation's ability to allocate resources towards ends other than direct profit. These restrictions were historically much more strict: Acting on the tenet of corporate theory that "the corporation has only those powers granted it by the state or incorporation or by the stockholder's compact," early courts required a quid pro quo benefit for any "charitable" corporate action. Where such benefit did not directly accrue, the act could be held ultra vires and be barred. Presently, case law reflects a more modern view of the role of the corporation, acknowledging that "contribution to social causes certainly can represent a genuine corporate benefit [by creating good will]." 5 Such discretion is not unlimited, however: "the expectations of the corporation and the requirement of the courts of some benefit from [corporate social action] appear to remain constant." 6

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1 Browne and Giampetro, p. 468
2 Stone notes in a succinct summary of this position: "The investors make their investments on the assumption that managerial discretion will be exercised in their favor. The manager's obligation to the shareholders is one for which the shareholders paid." [emphasis original]. (Stone, p. 566)
3 McCabe, pp. 4 – 10
4 McCabe, p. 11
5 Specifically, he uses Engel's definition: CSR "denotes the obligations and inclinations, if any, of corporations organized for profit, to pursue social goals that conflict with their presumptive shareholder desire to maximize profit." (McCabe, p. 2)
6 Carter, p. 534. (For an outline of the evolution of case law in this area, see Carter, pp. 523 – 532)
7 Carter, p. 532.
Environmental consequences of ACSR: “Tragedy of the Commons”

Granted that in the current and historical economic system, there are strong forces favoring ACSR behavior, the need for environmental policies has yet to be truly established. What is the connection between ACSR and “undesirable environmental outcomes?”

One of the best illustrations of this connection is “the tragedy of the commons.”

Garret Hardin described a pattern of behavior taken by rational, profit or utility-maximizing individuals towards finite public environmental goods; after the title of his article, this behavior pattern has come to be known as the “tragedy of the commons.”

The “tragedy of the commons” is predicated on three key points:

• Environmental resources are finite and can be exhausted.

• When access to these resources is truly free, benefits of exploitation accrue to the individual, whereas consequences of overuse are distributed over the whole community. In Hardin’s words: “Picture a pasture open to all... as a rational being, each herdsman seeks to maximize his gain. ...he asks ‘what is the utility to me of adding one more animal to my herd?’” In Hardin’s analysis, the herdsman sees a direct gain equivalent to one animal. The herdsman’s loss side is the animal’s contribution to overgrazing, which reduces the productivity of the pasture. This disutility is distributed to all users, however, and is therefore far more diluted than the direct benefit the herdsman accrues by adding the extra animal.

“The rational herdsman concludes that the only sensible course... is to add another animal to his herd... but that is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy... ruin is the destination towards which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons.” [emphasis added].

• Action in the collective good provides no reward to the individual, though s/he still suffers the consequences of the exploitation of others.

The connection between the tragedy of the commons and ACSR behavior is clear. Firms and their shareholders are the herdsman (or perhaps firms are the herdsman and shareholders are the herdsman’s creditors.) Profit-maximizing behavior is the adding of one more sheep; in Hardin’s extreme example, the aggregate result of this behavior is environmental ruin.

Implication of the Commons: need for different conceptions of corporate social responsibility

Evidence that the “tragedy of the commons” exists is strong. If one believes that environmental ruin (or at least unsustainable degradation) is a socially undesirable outcome of economic activity, then it becomes obvious that the narrowly profit-maximizing behavior described under “agent-of-capital social responsibility” is not socially responsible in an important sense. This begs the question of what the alternative is to ACSR is. The literature of corporate social responsibility provides a theoretical alternative, “agent of society social responsibility” (ASSR) (again, the terminology of Rodewald, and Browne and Giampetro is used).

10 Of course, Hardin’s “Tragedy of the Commons” provoked (and still provokes) intense debate at all levels of Hardin’s argument; Susan J.B. Cox, for example, has published an article disputing that a “tragedy of the commons” actually occurred on the common grazing lands of medieval and post-medieval England — the historical antecedents which Hardin drew upon in the article. She notes however: “Academics are often too facile in labeling an article as seminal, but ... ‘The Tragedy of the Commons’ deserves the accolade. The article has been reprinted over 50 times and entire books have been devoted to exploring the meaning and implications of Hardin’s memorable title. The phrase ‘tragedy of the commons’ has slipped into common parlance. ... (Cox, p. 50)

11 Hardin, p. 132
Agent-of-Society Social Responsibility (ASSR)

"Corporations which exist solely to maximize profit become disconnected from their soul... it makes no sense to compartmentalize our lives — to be cutthroat in business, and then volunteer some time or donate some money to charity. For it is business that is the most powerful force in our society... [and] it stands to reason that business sets the tone for our society."


ASSR is well-represented by this quotation by the founder of a company widely known as "socially progressive." At its lowest common denominator, the ASSR conception of corporate social responsibility is rooted in two observations:

- Businesses and corporations command huge financial resources, and
- Social problems are numerous, complex, and costly to resolve.

The conclusion which ASSR view partisans hold is that "firms' capacities to address social problems create an obligation to do so." This is the core of the ASSR view: that businesses and corporations should devote resources beyond those required by law or "rational self-interested compliance with established norms" to the provision of "good works" for the community... or on refraining from doing 'bad works' (like polluting rivers or raising prices) instead of deploying those resources towards profit maximization.

It should be noted that many observers and commentators add a third causative observation to the list: the workings and present condition of society are tightly bound up with the workings of firms and the capitalist system. The actions of firms cannot, therefore, be value-neutral with respect to the provision of social benefits and the distribution and equity thereof. Given this view, not acting to ameliorate social problems therefore means contributing to them; firms have a moral responsibility, not merely the capacity, to engage in CSR beyond mere compliance activities. This reasoning is evident is the quote from Ben Cohen.

Adherents to the ASSR view in general, and certainly those who believe in the moral responsibility argument articulated above, hold that socially responsible corporate behavior must affect the corporation at a deeper level than does mere charitable giving: "Corporate charity, whatever can be said for the practice, is irrelevant to real institutional reform. When a company is poisoning the atmosphere, the problem will not go away until the firm changes its ways of doing business, its quality control procedures, or its engineering review standards. Giving to the United Way changes nothing. The cigarette companies currently hard selling in the Third World cannot redeem the cancers they cause by sponsoring the civic light opera in New York."

This call for "deep reform" of the corporation which is characteristic of the ASSR view necessarily involves new frameworks for corporate decision-making; charity as a sidecar tacked onto profit-maximizing behavior is not acceptable. There is considerable speculation and little consensus as to what form a new decision framework — or a new set of internal rules — for producing socially responsible corporate behavior might take or how such a framework might evolve. Two models are included in appendix ___ for the interested reader.

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12 Browne and Giampetro, 472
13 Browne and Giampetro, 472
14 Mashaw, p. 115
15 McCabe, p. 2
16 Stone, p. 558
ASSR presents problems as a goal/standard

The problem with holding ASSR up as a desired standard of near-term corporate social responsibility is two-fold:

- Corporations are unlikely to adopt this view of responsible behavior readily.
- There are arguments against the theoretical foundation of ASSR which are of at least partial validity.

These arguments are as follows:

**ASSR not just around the corner.**

It seems clear that far-reaching institutional changes which will revise definitions of virtue and vectors of loyalty, to paraphrase Stone, are not about to be adopted wholesale into the economy. There is the real weight of tradition and law which makes the corporation's first obligation the stewardship of investors' capital. There are the documented reductions in stewardship activities and provision of social benefits which accompany structural adjustments to the heightened competition and "right-sizing" which seem to characterize the current economy. And there is the day-to-day experience of the Environmental Protection Agency and the environmental advocacy community which highlights the fact that willful violation of environmental and workplace regulatory standards occur frequently. (If numerous firms are not in compliance with the law, it seems doubtful that they are willing to adhere to standards of responsible action beyond the law.) Further, those who write of ASSR with words like "culture change" and "reconceptualization of the modern business corporation" acknowledge that changes are necessarily gradual; ASSR cannot be "just around the corner" by its very nature.

Beyond these impediments to waking up in an ASSR world tomorrow, there is a final and very important one: There is little societal consensus as to what responsible action means in general, to say nothing of what it means in particular situations. And where societal signals are mixed, there is little basis for firms to act as agents of society even were they inclined from within to do so.

**And theoretical objections are significant**

In addition to the practical problems which ASSR poses, the concept meets with important philosophical objections. The most vehement of these arguments is made by Friedman ("the social responsibility of business is to increase its profits"). His position is that since management has an inalterable duty to steward its investors' capital, placing other burdens on business creates a potential moral conflict for managers. They are caught between two masters: employing capital for the benefit of shareholders (to whom they have a legal obligation) and employing capital to achieve other social goals. He asserts that when managers channel corporate resources to public ends they abrogate the redistributive function of government — an unacceptable muddying of roles given that these individuals are not public officials but are rather "chosen for their posts by strictly private groups."

Building on Friedman's position that it is properly the role of government to engage in redistribution (but without the element of moral outrage), Mashaw notes that corporate provision of larger social benefits raises equity and distributional questions, both as regards costs and benefits. Of the cost side, he writes, "General support of CSR in all contexts, letting

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17 For example, expenditures on planning and conservation activities in the electric utility industry have reduced markedly as the industry cuts costs in preparation for privatization of generation and (in some cases) other elements of the system. (Personal interview, Steve Connors, MIT Energy Lab.) There is the ongoing trend in reductions of workplace benefits as a result of cost-cutting (see Gertler). For general commentary on the effects of heightened competition on innovation and provision of social benefits, see Sabel and also Gertler.
the costs fall on investors, consumers, or employees as they might, would only by chance satisfy [the] definition of a fair tax.” 18 In short, government, not the private actor, has the moral responsibility to set policies which allocate social benefits, not private actors.

“Assisted corporate social responsibility” and a definition of public policy.”

If firms acting “naturally” in ACSR modes produce socially undesirable outcomes, and if near-term adoption of ASSR is unlikely on practical grounds (and undesirable on philosophical ones, at least to some), what sort of models for eliciting socially responsible behavior from firms — responsible in that it achieves desirable social outcomes beyond the allocation provided by the market —are possible?

To answer this question, a return to Hardin and the tragedy of the commons is useful. Hardin concluded that access to the commons (environmental public goods) cannot be truly free — that access and use must have restrictions, and social mechanisms must be created to coerce responsible behavior: “Coercion is a dirty word... but it need not always be so... the coercion I recommend is mutual coercion, mutually agreed upon by the majority of the people affected.” 19

“Tragedy of the Commons” and “Assisted Social Responsibility”

Hardin’s words point to what shall be termed “assisted social responsibility.” This idea is rooted in the argument, developed in this chapter, that the market as currently constituted and firms’ altruistic impulses are insufficient to create the behaviors needed from firms (and individuals) to achieve environmental outcomes which society has judged desirable. The core of assisted social responsibility is an idea that has become well-accepted in the 25 years since Hardin’s article was published — that society must create mechanisms and structures under which environmentally responsible behavior and outcomes are obtained from individuals and firms. 20 This rephrasing of Hardin’s “mutual coercion mutually agreed upon” highlights the roles of society in “assisted social responsibility:” “society” creates mechanisms and structures, “society” determines what constitute desirable environmental outcomes. These two roles highlight two of the principal functions of government:

- Government functions as a means to arrive at understanding and at least partial agreement of what society thinks is desirable and responsible.
- Government is the executive arm of society’s choices, attempting to effect changes which reflect these choices in the physical/economic/social environment in which society exists.

It should be little surprise, then, that there is a major role for government in the realm of “assisted social responsibility.” In government is vested authority to alter structures of markets and firms; in government is vested significant authority to articulate what constitutes “environmentally responsible behavior and outcomes.”

A definition of public policy

With this recognition of the role of government and the understanding of “assisted social responsibility” enumerated above, a definition of what constitutes a public policy for environmental protection follows naturally. Public policies are the means by which government acts to create conditions of “assisted social responsibility.” Therefore, public policies for

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18 Mashaw, p. 122
19 Hardin, p. 140
20 Such mechanisms and structures may function to change the incentives which the market provides; or they may impose additional incentives and penalties atop those offered by the market. This distinction between modes of action is not important to the idea of “assisted responsibility;” it is important to understanding the different schools of thought about how best to implement it. Chapter two deals explicitly with a taxonomy of “mechanisms and structures.”
environmental protection (1) are administered by government and (2) are defined by the possession of a particular:

- **goal:** eliciting a particular behavior or outcome which reflects a standard of "environmentally responsible behavior" (or outcome) in a particular situation, and

- **method:** the creation/use of social mechanisms and structures to bring about this goal.

(This definition echoes, in a focused way, the Kraft and Vig definition of achieving "goals and objectives through a conscious choice of means.")

It should be noted that "assisted social responsibility" and the policies which operate to create it do NOT attempt to "make" firms act in ASSR ways. By definition, ASSR behavior is rooted in moral belief; an ASSR firm acts as it does because it believes it is right to do so. This cannot be "forced."21 What the policies of assisted social responsibility attempt to do, rather, is change the calculus by which firms figure costs and benefits. This may be by law; legal penalties can add costs to behaviors which society judges irresponsible. It may be by taxes or other market changes which change costs and benefits within a standard accounting framework. Or, as shall be seen in Chapter Three, it may be through the means available to voluntary programs.

**Testing Voluntary Programs against this definition.**

Do Voluntary Programs meet this definition of public policies for environmental protection? The answer must be "yes;" consider as a representative sample the six voluntary programs which are used as case studies for this thesis (presented fully in Chapter Four.) Data-gathering included the goals and methods of each program.22 These are presented in tabular form below; it is clear that voluntary programs do indeed meet the definition of "policy."

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Goal</th>
<th>Method (Mechanisms/Structures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lights</td>
<td>reduce atmospheric pollution associated with the energy consumed by lighting</td>
<td>partnerships in which businesses commit to profitable lighting efficiency improvements in return for recognition and technical support</td>
</tr>
<tr>
<td>33/50</td>
<td>bring about accelerated reductions in the amount of environmental releases and transfers of 17 specified toxic chemicals</td>
<td>voluntary corporate commitments in return for public recognition23</td>
</tr>
<tr>
<td>Building Air Quality Alliance</td>
<td>improved indoor air quality (IAQ) in public and commercial buildings</td>
<td>promotion and showcasing of good IAQ management practices through partnership with facility operators and managers who have implemented and air quality action plan</td>
</tr>
</tbody>
</table>

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21 Though it could be argued that simple provision of information could assist an ASSR firm in pursuing socially responsible behavior; provision of information is also a mechanism of policies acting to create assisted social responsibility (see Chapter Three).

22 For a complete description of data-gathering areas, see Chapter Four.

23 And possibly early emissions reductions credits under the Clean Air Act Amendments of 1990; see write-up of 33/50 program in Chapter Four.
Pesticide Environmental Stewardship Program
reduce public and ecosystem health risks posed by pesticide use partnership with users who subscribe to a shared set of principles for good pesticide environmental stewardship and who implement site-specific stewardship plans based on these principles.

Figure 1.1: Testing sample voluntary programs against the definition of public environmental policy
CHAPTER TWO: A CONCEPTUAL UNDERSTANDING OF THE EMERGENCE OF VOLUNTARY PROGRAMS

Understanding emergence is a tool for understanding context

Chapter One presented a view of the origins of public environmental policy in the tension between — on the one hand — behavior rooted in the historical realities of markets and legal tradition (behavior characterized as agent-of-capital social responsibility) and — on the other hand — the environmental outcomes of such behavior (the tragedy of the commons). From this tension, it derived an understanding of public policies as characterized by goals and methods or structures for achieving responsible behavior from individuals and firms. Finally, it was demonstrated that voluntary programs fit this definition.

Nothing has yet been said, however, explaining the recent emergence and proliferation of voluntary programs or how they relate to other environmental policy approaches. Both topics are important; voluntary programs do not exist within a policy or historical vacuum. Evaluating voluntary programs means not simply evaluating them as public environmental policies, but evaluating them relative to other environmental policy approaches. To do this, an understanding of how voluntary programs relate to these other approaches is critical. The question of emergence is important, because this thesis is concerned with voluntary programs as a phenomenon, and must therefore answer the questions “Where did voluntary programs come from? Why now?”

It is the argument of this chapter that the emergence of voluntary programs can be understood as a comprehensible outcome of mounting criticism and dissatisfaction with the dominant environmental policy mode. Developing this argument will create an understanding of voluntary programs relative to other policy approaches and help answer these questions of where and why?

What is the dominant mode of environmental protection?

Federal environmental policy and the law which embodies a great deal of this policy is by no means homogenous, and there is a great deal of it. (West’s Selected Environmental Law Statutes, for example, runs to 1200-plus pages and is itself abridged.) So any analysis which attempts to narrowly define “the dominant mode” of environmental protection must be taken with several grains of salt. Nonetheless, there is value is attempting a broad characterization of this mode, which is generally given the name “command and control.” This is best accomplished by first understanding the conditions of its emergence:

A turning point and a flurry of legislation.

Contrary to popular conception, government involvement with environmental resources stretches back far longer than the first Earth Day 25 years ago. Land dispersal and homesteading policies were cornerstones of westward expansion and manifest destiny. Sanitation and urban public health movements — and the resultant creation of public health laws and departments marked the latter part of the 19th century. The federal government took on a role as conservationist under Teddy Roosevelt’s presidency, which laid the backbone of the national park system. Franklin Roosevelt’s New Deal, building on public support in the wake of natural disasters closely tied to human use of the land — such as the Dustbowl and the Johnstown flood — placed large powers of environmental management and decision-making into federal hands.24

24 Abstracted from Marcus pp. 45-75

A CONCEPTUAL UNDERSTANDING OF THE EMERGENCE OF VOLUNTARY PROGRAMS 21
All this aside, however, there is little question that the late 1960s and the turn of the decade marked a turning point in the relationship between government and the environment.  

This turning point was driven by public concern over the obvious deterioration in environmental public goods such as clean air and water. Such concern manifested most obviously in the teach-ins and marches which drew millions to the first Earth Day celebration in 1970. It was characterized by a willingness to apply regulatory authority for the first time to the technologies of production in pursuit of broadly stated environmental goals, an attitude typified by landmark pieces of environmental legislation such as the Clean Air Act and the Clean Water Act. Kraft and Vig describe the process which led to passage of landmark pieces of environmental legislation in the early 1970s as one of “policy escalation.”

“President Richard Nixon ... seized the initiative by signing NEPA [the National Environmental Policy Act] as his first official act of 1970 and proclaiming the 1970s as the ‘environmental decade.’ In February of 1970 he send a special message to Congress, calling for a new law to control air pollution. The race was on as the White House and congressional leaders vied for environmentalist’s support.”

At the end of 1970, Nixon established the Environmental Protection Agency (EPA) by executive order. The EPA consolidated programs previously spread out across the bureaucracy; its legislative mandate grew rapidly with the proliferation of environmental statutes during the 1970s.

DeWitt John argues that the politicians who decided to seize on the political capital provided by public concern over the environment (exemplified by the marches and teach-ins of Earth Day 1970) “quickly settled on command-and-control regulation, guided by [a strong federal enforcement role] as the way to protect the public’s interest in environmental quality.”

Whether this view of federal legislative activity is accurate — politicians seizing the moment and using the most convenient available tool of government power — or whether the times would admit of no other solution, the fact remains that the vast body of federal environmental legislation is of a command-and-control variety.

What does this mean?

Understanding Command and Control

“Command and Control” is not a precise term; rather, it describes a broad conception of the mechanisms government usually employs to elicit responsible environmental behavior. John describes it this way:

“This [command and control] regime is based on federal laws that set standards for air and water quality, for emissions of materials that might harm the environment, and for the handling of dangerous substances.” In practice this translates into a mixture of permits to emit, specified control technologies, and process standards detailed in regulations issued under

25 For excellent and far more detailed accounts of the history of this “turning point” and the years which immediately followed, the reader is referred to the following sources:
- Civic Environmentalism, DeWitt John, Chapter Two “Beyond Regulation”
- Environmental Policy in the 1990s, Vig and Kraft, eds., Chapter One “Environmental Policy from the 1970s to the 1990s.”
26 For an annotated list of major environmental statutes see Kraft and Vig, Appendix One.
27 Kraft and Vig, p. 12
28 Nixon was actually considering a complete reorganization of the executive branch which would have created a Department of Environment and Natural Resources. Political considerations within the bureaucracy precluded this approach, with the result that the EPA was formed by executive order; “this meant that EPA was organized with no overall legislative mandate to pursue broad goals of environmental quality; its mandate is the sum of separate authorizations for individual programs” (John, p.25).
29 John, p. 23
30 John, p. 4
the authority delegated to the regulatory agency by law. The regulatory agency tracks compliance through reporting requirements, monitoring and inspection, and imposes administrative or (through the courts) criminal penalties on violators.

To gain an appreciation for the complexity and flavor of "command and control," consider this very general sketch of the stationary source provisions of the Clean Air Act:

**The Clean Air Act.**

The Clean Air Act is one of the nation's landmark environmental laws. Last amended in the 1990s, the Act makes broad distinctions between stationary and mobile sources. A major goal of the act is to ensure the achievement of health (and welfare)-based National Ambient Air Quality Standards (NAAQS) for a set of pollutants including Carbon Monoxide, Particulates, and Ozone. States are responsible for developing State Implementation Plans (SIPs) which use rollback models to set source emission limits to achieve the ambient limits. Large stationary sources are essentially licensed to emit at specified levels under the SIPs. States by no means have complete discretion, however, as different control technology requirements apply to new versus existing sources, and in areas meeting NAAQS requirements versus those which do not. Different regulations apply to 189 specified hazardous air pollutants; the act contains at least five different standards of control technologies with acronyms like RACT, MACT, BACT, etc. which apply to different sections of the Act. One of the better-known provisions of the 1990 amendments sets up an 302 emissions permit trading scheme, targeted principally at utility power plants.

As can be seen, "command and control" is not a simple idea, but a complex set of concepts, often implemented through large, balkanized pieces of legislation.

**The "Limits" to Command and Control?**

It is this chapter's hypothesis that voluntary programs may be understood as comprehensible outcomes of a critique of command and control. Having achieved some understanding of what command and control is, it is now necessary to understand the concerns which form the source of the widespread belief that "command and control" has reached, more or less, its practical limits. For it is this belief which creates forces for change and advocacy of alternatives. Such belief is rooted in concerns about:

- Actual progress made since the 1970s in improving environmental health,
- Limits of institutional resources available to pursue command-and-control approaches,
- Costs of environmental protection to industry and its impacts on competitiveness, and
- Inherent inefficiencies and limitations of an approach to environmental protection rooted in "adversarial legalism." 31

Each of these concerns shall be addressed briefly in turn.

**Progress made**

The debate over the efficacy of environmental policy and the actual progress made in cleaning up the environment exists within a context succinctly described by Bartlett:

"All of these new, sometimes bold, environmental initiatives were implemented in an era when general confidence in government as a problem solver was declining, such that by the 1980s policy failure had become conventional wisdom among voters, journalists and politicians . . ." 32

31 The term is taken from Kagan and his 1991 article, "Adversarial Legalism and American Government."

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*A Conceptual Understanding of the Emergence of Voluntary Programs*
demand for evidence of [environmental policy] success has become increasingly insistent, impatient, and narrowly focused.”

There is, therefore, something of an atmosphere of impatience regardless of the actual overall performance or environmental policy initiatives. This aside, though, the results of the past 25 years of environmental policy are equivocal. To be sure, there are success stories — environmental lead levels have plummeted with the banning of leaded gasoline, for example, and it is generally acknowledged that the “obvious” problems have been cleaned up. Rivers no longer catch fire and black soot pouring from a smokestack is a rare sight.

On the other hand, an assessment of the Clean Water Act published in 1993 pointed toward a growing mediocrity in water quality: the percentage of lakes and estuaries which partially supported potential uses increased, but those fully supporting those uses had declined over time. Air quality, particularly as measured by ozone levels, has remained elusive; the 1990 Clean Air Act Amendments are the latest, most stringent, legislative attempt to find effective regulatory mechanisms. EPA’s 1987 internal report *Unfinished Business: A Comparative Assessment of Environmental Problems* concluded that “overall, EPA’s priorities appear more closely aligned with public opinion than with our estimated [actual environmental] risks;” — a statement that environmental protection efforts make political, but not necessarily “objective” sense. The follow-up to *Unfinished Business*, a report produced by EPA’s Science Advisory Board, concurred and noted “at EPA there has been little correlation between the relative resources dedicated to different environmental problems and the relative risks posed by those problems.”

(\textit{It should be noted, however, that the cultural changes in firms and industry which have been produced by regulation are difficult to assess and almost assuredly important and significant. The National Environmental Policy Act, for example, has been assessed negatively according to the transaction costs it imposes through requiring environmental impact statements on projects with significant federal components, but an evaluation in terms of the “organizational and managerial changes it stimulated in bureaucratic agencies” towards greener practices might yield an entirely different evaluation.})

**Institutional limits and administrative costs**

There is substantial concern over EPA’s ability as the principal environmental regulatory agency to administer even its current statutory regulatory obligations, much less its ability to expand its traditional regulatory role. The environmental legislation passed during the 1980s and early 1990s was characterized by increasing specificity, amounting in the view of many analysts to “micro-management” of the agency:

> “The EPA’s compliance headaches are, for the most part, caused by Congress’ habit of packing legislation with a number of demanding deadlines, inflexibly detailed management instructions, and “hammer” clauses that threaten dire consequences should the agency fail to comply with various statutory directives.”

This increasing load of mandated responsibilities and deadlines, coupled with essentially zero or very modest resource growth over the past 15 years, has created a situation wherein EPA is “decades behind in complying with major requirements in virtually all its ten major statutory programs,” with former administrator William Reilly estimating that EPA has been able to

\[32\] Bartlett, p. 167
\[33\] Adler \textit{et al.}, pp. 26-27
\[34\] EPA, “Unfinished Business.”
\[35\] EPA, “Unfinished Business,” p. xix
\[36\] Science Advisory Board, p. 3
\[37\] Bartlett, p. 174
\[38\] Rosenbaum, p. 132
\[39\] Rosenbaum, p. 131
meet less than 20 percent of its Congressionally imposed deadlines. Further, given the current atmosphere of fiscal austerity in the federal budget, it seems unlikely that resources will increase significantly in the near or medium term.

States and localities, which bear a significant portion of the economic burden of implementing federal environmental legislation (e.g. state implementation plans under the Clean Air Act), also complain that this environmental mandate outstrip their institutional resources; in spring of 1992, for example, Gov. Pete Wilson of California stated that California would not enforce federal Safe Drinking Water Act standards for copper and lead because they were too expensive. 40

Costs to industry and effects on competitiveness

Many environmentalists were opposed to the passage of the North American Free Trade Agreement (NAFTA) because they believed that the lax environmental protection climate of in Mexico would lure manufacturing firms looking to cut costs south of the border. In fact, evidence is inconclusive as to whether environmental policy climates have a significant impact on firm location — lower wage costs and expanding markets in developing countries seem to be far more significant influences on location trends 41 — but the point is nonetheless illustrative. Industry has long protested that the costs of environmental protection are prohibitive, in excess of benefits, and erode their competitive position. This position has gained more credibility as concerns over competitiveness, the relative position of the US in the world economy, and “deindustrialization” have become large political issues. 42 (In many ways, the emphasis of the current administration on developing markets for environmental technology products is a way to finesse the question by giving US firms an explicit way to profit from their environmental technology investments.) 43 California, which has traditionally led the nation in air pollution control requirements, has engaged in a public debate over whether the state’s economy can afford the costs of clean air. 44 In the “policy escalation” days of the early 1970s, Senator Muskie was able to argue in floor debate on the Clean Air Act that pollution control requirements might, as a matter of environmental necessity, drive some firms out of business 45 It is difficult to imagine a similar argument being made by a supporter of an environmental protection bill today.

Also important to the competitiveness issue is the effect of regulation on innovation. Where regulation is technology-based — that is, focused on specifying required end-of-pipe control technologies — concerns exist that production technologies are “locked in” and innovation is stifled. 46 Given the strong connection between innovation and competitiveness, this regulation/innovation issue cannot help but to play in the debate over “command and control.”

The costs issue has gained added political importance as the ozone control requirements of the Clean Air Act Amendments of 1990 come into effect. Slightly increased costs for reformulated gasoline (required at certain times of year in non-attainment areas) have aroused significant ire. This is one of the few cases in which consumer prices have been directly affected by pollution control requirements; it seems that costs which are “hidden” within firms are more palatable to the public.

40 John, p. 27
41 Choucri, p. 211
42 Interestingly, the academic literature on regional growth and location theory (which takes precisely these questions quite seriously) makes little mention of regional variability in environmental protection costs as drivers of industrial location trends. See, for example: Piore and Sabel, “The Mass Production Economy in Crisis,” Stroper and Walker, “How Industries Produce Regions,” and Bluestone and Harrison The Deindustrialization of America.
43 For an example of this market-emphasis, see Technology for a Sustainable Future, a major policy statement produced by the National Science and Technology Council.
44 get ref
45 Stewart, 392
46 Ashford and Heaton, p. 172.

A CONCEPTUAL UNDERSTANDING OF THE EMERGENCE OF VOLUNTARY PROGRAMS

25
Limits of adversarial legalism

It is generally acknowledged that the command and control system has created a highly adversarial relationship between regulators (principally EPA) and the regulated community. In the words of William Ruckelshaus, former EPA Administrator, EPA is the “gorilla in the closet,” the door of which is opened when a firm is out of compliance. This means that the interaction between regulator and regulated is of a highly legal nature, with all the transaction costs that this implies — time and money in court decisions, the consumption of scarce government and private sector resources better spent on positive action than legal wrangling.

This situation and its effects are described aptly by Robert Kagan, who has coined the term “adversarial legalism” to describe what he feels is a set of “legal propensities” characteristic of the culture of regulation in the United States. He defines the term as “a method of policymaking and dispute resolution characterized by comparatively high degrees of (1) formal legal contestation, (2) litigant activism: the gathering and submission of evidence and the articulation of claims is dominated by disputing parties or interests, (3) substantive legal uncertainty: official decisions are variable, unpredictable and reversible; hence adversarial advocacy can have a substantial impact.” While the system of adversarial legalism “guards against administrative arbitrariness or ‘capture’ [or the regulators by the regulated community]. . . [it] also breeds legal deadlock and social inertia.”

There is widespread feeling on the part of high-level government policy-makers that the transaction costs imposed by a highly distrustful adversarial relationship with the regulated community are unacceptably high — both to the regulated community and the public interest. Consider the following quotes, which are not atypical:

- “Only by bringing people together from all sides of these issues can we identify common ground, bridge old differences, and find new solutions [to environmental problems].” (Vice President Al Gore)
- “This plan provides us with a shared vision of the future and points us toward greater opportunities to harmonize environmental protection and economic growth. In the spirit of partnership embodied in the plan, I encourage your comments, participation. . .” (Carol Browner, current EPA administrator, introducing EPA’s strategic plan.)

If not command-and-control, then what?

The existence of these concerns inevitably leads to prescriptions for fixes, which begs the question: “What are the alternatives to command and control?” That such alternatives exist has been implicit in the discussion thus far. The definition of public policy and “assisted corporate social responsibility” developed in Chapter One focused on “structures and mechanisms” for eliciting responsible behavior, but did not specify that these structures and mechanisms must be rule-based. John’s argument that command and control was simply a politically expedient way to protect environmental quality in the charged environmental atmosphere twenty-five years ago strongly suggests other that alternatives exist, at least in theory. A structure for thinking about such alternatives is developed below.

Goals and methods as keys to understanding different schools of policy.

In the two defining characteristics of “public policies for environmental protection” — a goal of eliciting environmentally responsible action from individuals/firms and a commitment to doing so by instituting social structures and mechanisms — we have the means by which to characterize the different schools of thought on the public policies of environmental protection.

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47 John, p. 26
49 Kagan, p. 141
For it is precisely in the definition of “responsible action” and architectures of these mechanisms and structures meant to bring it about that the differences among policies appear. For the purpose of introducing a broad vocabulary for describing environmental policies, convenience, the most widely held of these definitions and ideas are summarized below. Note: No connection is imputed between the left and right sides of the table:

**A Two-Dimensional Structure for Environmental Public Policies:**

<table>
<thead>
<tr>
<th>Definitions of “Responsible Action”</th>
<th>Conceptions of Structures and Mechanisms to Create Responsible Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Practicable.</strong> Responsible Action is the level of environmental protection practicable to achieve without sacrificing economic competitiveness.</td>
<td><strong>I. Property Rights.</strong> Establish property rights and markets for emissions of undesirable substances into the environment.</td>
</tr>
<tr>
<td><strong>B. Perfect Market.</strong> Responsible Action is equated with society’s valuation of environmental goods, as determined by the operation of the market, given full information and internalized environmental costs.</td>
<td><strong>II. Rules.</strong> Rules specifying performance (e.g., emission levels), production/control technologies, or process standards by source/facility or source/facility type, accompanied by close monitoring and enforcement mechanisms.</td>
</tr>
<tr>
<td><strong>C. Baseline.</strong> Delivery of a “baseline” level of environmental health defined by some current-period metric — e.g., achieving ambient levels of particular pollutants sufficiently low to protect the most vulnerable members of the population, reducing lifetime cancer risk to a specified level, or achieving “fishable, swimmable waters.”</td>
<td><strong>III. Incentives/Liabilities.</strong> Create economic incentives (grants, subsidized technology development, preferential tax treatment) which make responsible action attractive; alternately, establish liabilities (e.g., standing to sue) for irresponsible action.</td>
</tr>
<tr>
<td><strong>D. “Sustainability”</strong> : Economic Behavior which does not impair the ability of future generations to sustain themselves on the environmental and natural resource base;</td>
<td><strong>IV. Values Shift.</strong> Fundamental culture shift, resulting in a new ethic of human interaction with nature and a rewriting of the rules of profit and gain by which the economic system functions.</td>
</tr>
</tbody>
</table>

Figure 2.1: Characterizing environmental policies by definitions of responsible action and conceptions of structures/mechanisms

**Caveats and Utility.**

In practice, it is rare that any public policy approach to environmental protection embodies a single definition of responsible action or even a single approach to structures and mechanisms. Advocates of a public policies to achieve a “sustainable economy,” for example, would probably

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50 The “widely held” definitions and ideas presented in the table are derived from a process of aggregation and synthesis incorporating a survey of the literature, general academic work in the field, and the author’s best judgment. Representative references include Ashford, Baumol and Oates, and Noll.
impose a simultaneous "baseline" requirement of protecting human health. Legislation which
sets "baseline" goals often takes into account their economic feasibility.

Likewise, those who advocate a rule-based approach would probably list a "value shift" as
one end which they wish to achieve — that is, they would argue that environmental-based
decision making can be institutionalized by prolonged operation of the firm under regulatory
rules. Nonetheless, this table is valuable because it provides a way to situate command and
control within the universe of environmental policy approaches and a way of conceptualizing
change.

Characterizing command and control
Under this structure, "command and control" regulation is rooted heavily in a "rules" idea of
structures and methods, but it addresses multiple goals (including "baseline," and
"practicable," ) and has been used to enable other approaches — such as property rights under
the SO2 tradable permits scheme of the 1990 amendments.

Making sense of proposals for change
Out of these different perspectives on the shortcomings of command and control as it is currently
constituted come a great number of proposed alternatives. Some are aimed at "fixing" command
and control itself; others wish to shift new environmental protection policies into different
"structures/mechanisms" categories altogether. Understanding how these proposals relate and
combine to create significant forces (or resultant vectors) for change is a daunting task, but a
necessary one if this chapter is to show that voluntary programs are a comprehensible response
to critiques of command and control. In attempting to describe these forces, a model developed
by DeWitt John in his book Civic Environmentalism is very useful:

Cataloging the content of proposed "fixes:" common themes for change
John notes that the dozens or hundreds of prescriptions for correcting the course of environmental
policy, diverse as they are, incorporate four broad themes.51

- Unfinished business. Across categories, prescriptions for new approaches to environmental
  policy incorporate the idea that there are areas of the environment and kinds of
  environmental problems which are currently not addressed well. Examples of such areas
  include: control of nonpoint sources of pollution, pollution prevention, and systems-level
  ecosystem protection and restoration.

- Inadequate tools. This is the conviction, held across all categories of proposals, that
  traditional policy tools (e.g., command and control) are not adequate to address the
  unfinished business, particularly nonpoint pollution, endangered ecosystems, and pollution
  prevention. Therefore, other devices (or, in our terminology, structures and mechanisms)
  must be tried.

- Fragmentation. The problems posed by fragmentation of institutions and policy approaches
  are another cross-category concern. The consequences of fragmentation of authority within
  EPA have received considerable attention — both in terms of policy cohesiveness52 and the

51 John derives these "common themes" by investigating three categories of proposals: those aimed at (1)
  strengthening the environmental voice in the policy process, (2) achieving a better balance of
  environmental and economic values, and (3) moving towards sustainability. His reasoning is presented in
  Appendix A.

52 Rosenbaum, for example, writes: "Public agencies need a statutory charter that explicitly declares their
  primary policy objectives and establishes priorities among them. Such institutional definition is essential
  for establishing politically and judicially defensible program priorities and for deciding how limited
  resources must be administratively allocated. (p. 123). . . no organic act or charter clearly defines the
  agency’s mission or helps to set its policy priorities . . . the agency’s mission is the sum of all the different
  laws it administers” (Rosenbaum, p. 125).
costs imposed on firms who must follow different reporting protocols for each law (and, in many cases, sections of laws) with which they comply.

- Inadequate treatment of complexity, uncertainty, and risk. Proposals in all categories hold that current accommodations with complexity, uncertainty and risk within environmental policy are insufficient. This is reflected both in priority-setting (e.g., what is the threshold level of certainty for regulations to be issued?) and in the inability of current approaches to adapt over time as agencies, firms, and science move along the learning curve of a particular problem.53

Testing Voluntary Programs against this model of forces for change.

It is useful to sum up the argument so far. First, a set of concerns associated with the "limits of command and control" was enumerated. Using the model of DeWitt John, four broad "themes for change" were identified. Graphically, this can be shown as:

![Diagram showing concerns about current approaches into common reform themes]

Figure 2.2: Translating concerns about current approaches into common reform themes

If Voluntary Programs are, as hypothesized, comprehensible outcomes of the current critique of command and control, then under the model articulated above, they should:

- Be responsive to the enumerated concerns about the limits of command and control, and
- Embody one or more of the "common themes for change" presented in the previous section.

As shall be seen below, voluntary programs do indeed fulfill both of these requirements.

Embodifying Reform Themes.

Voluntary programs are billed explicitly as "new tools" for government to use in the effort to protect the nation's environment. Their general model — the use of public relations and technical assistance incentives to obtain environmental practices improvements from firms — is seen as a distinct departure from command and control approaches. They clearly address the "inadequate tools" reform theme.

Because they operate outside areas in which the regulatory agency has statutory authority to regulate, they are aimed at "unfinished business." Indeed, they are promoted not only as tools for areas in which regulation does not exist ("unfinished business"), but where it would be very difficult to regulate, owing to the complexity or site-specific nature of the problems addressed. So, in this sense, they are seen as mechanisms for dealing with complexity.

53 Kai N. Lee explores this need for, characteristics of, and obstacles to "adaptive management" — defined as "an approach to policy that enables experimentation and learning to take place" with resultant midstream policy modification (Lee, p. 51) — in his work Compass and Gyroscope, to which the reader is referred.
Thus, voluntary programs can be seen as incorporating elements of three of the four “reform themes” found in the generative environment. They do not, however, address concerns about fragmentation. Indeed, the proliferation of voluntary programs is proving frustrating to at least some firms, who feel confused about the number of uncoordinated programs and, in some cases, overcommitted.\(^5\)

**Addressing concerns about command and control**

Because they are not statutory, voluntary programs presumably do not impose excessive costs on firms, and thus respond to the concerns about costs of environmental protection and their effects on competitiveness.

Responsible environmental action is obtained within them on a quid pro quo basis rather than on a “command to comply” basis. This is cited as a way to move beyond the “adversarial legalism” which largely characterizes the relationship between government and industry in the environmental area.

Additionally, voluntary programs are seen as less costly to run than traditional regulatory programs and as a way of leveraging limited government resources to achieve environmental ends. In this sense, they address the question of limited institutional resources; though agreement on this is by no means universal.

**Voluntary programs: a comprehensible outcome of a critique of command and control.**

In short, the emergence of voluntary programs as an approach to environmental protection does make sense as a result of the “forces for change” in the environmental policy field. In fact, the argument is quite convincing: voluntary programs touch upon three out of the four of the “reform themes” and three out of four “concerns about current approaches.” This explains, at least in part, the emergence and proliferation of voluntary programs over the past few years. (Though, as the case studies shall show, it is by no means a complete explanation.) The development of this argument has also served to contextualize voluntary programs within the larger universe of policy approaches to environmental protection — a necessary step in performing analysis and evaluation.

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\(^5\) Phone interview, Jane McGuire, GEMI. These concerns, raised at an informal meeting of GEMI members and representatives from a number of voluntary programs, have led to an effort to establish a working group to coordinate voluntary programs within the agency. This group is “focusing on first tier issues like avoiding duplication, getting common approaches to recognition, screening etc.” (personal interview, Mike Burns, 33/50 Program)
CHAPTER THREE: LIMITATIONS AND FUNCTIONING OF VOLUNTARY PROGRAMS IN ELICITING RESPONSIBLE ACTION

The previous chapter argued that the emergence of voluntary programs could be understood as arising out of a critique of command and control approaches to environmental protection. The task now is to move beyond explanation to formulating hypotheses about the effectiveness and applicability of voluntary programs as policy instruments. This is critical for the purpose of addressing another question central to this thesis — that of to what ends and with what structures voluntary programs may be effective policy instruments.

This chapter describes briefly three inherent constraints under which voluntary programs must operate, and examines in detail the nature of one of these, the non-regulatory incentives which voluntary programs must contain to secure participation and create commitment.

Inherent constraints under which voluntary programs must operate.

Voluntary programs operate under certain inherent constraints, and must incorporate an awareness of and reconciliation with them to be effective policy instruments. These constraints are created by the intersection of:

- The nature of voluntary programs (e.g. they are non-compulsory and dependent on participant commitment to achieve goals), and
- The nature of certain environmental problems to which voluntary programs might be directed as policy instruments.

This somewhat abstract statement is best understood by enumeration and illustration of the constraints themselves:

Aggregate, not uniform, results.

On the basis of first principles, voluntary programs seem ill-suited to application where obtaining uniform results across a broad number of firms is critical. For example, if a national environmental goal is to reduce the emissions of greenhouse gases, it makes little difference from which firms or from which regions such reductions are obtained; the physical nature of the mechanisms of global climate change are such that aggregate and not local emissions are important to eventual environmental effects. On the other hand, in the situation where preventing local “hot spots” of an eco- or human health toxin is important (e.g., heavy metals, dangerous gases), effective policy can demand no less than strict adherence to standards by every possible emitting source. Voluntary programs by nature cannot command such adherence.

Interestingly, this constraint places voluntary programs on both sides of the public environmental good coin. On the one hand, where a public environmental good (e.g., lower environmental stocks of greenhouse gases) can be created or improved by the actions of less than all parties, voluntary programs may be well-suited. On the other hand, where such goods can be destroyed or seriously reduced by one bad actor, voluntary approaches would seem ill-suited.

Placement in Legislative Niches

By definition, voluntary programs do not have the force of law. They must exist in niches within the environmental policy system which accommodate existing statutes. A voluntary program cannot, for example, supplant a mandating licensing or permitting process.

Incentives not directly tied to enforcement.

Even if one is concerned about aggregate, rather than specific results, there still must exist incentives to convince a sufficient number of firm or other actors to participate in a voluntary program if the program is to achieve its objectives. Voluntary programs must be structured to
induce such participation and create commitment on the part of participants. "Command and Control" approaches are less preoccupied with "creating participation and inducing commitment" because regulations have the force of law and (consequently) the regulatory agency has various enforcement tools (fines, shutdowns, legal action) available to it. Voluntary programs, to quote William Ruckelshaus, have no "gorilla in the closet," and must develop alternate incentives. What these incentives might be and when they might be presumed to be effective then become the issue; these questions are examined in detail below.

**Enumerating Incentives for Volunteerism**

The first two constraints listed above are reasonably self-explanatory and self-contained. The third, however, is not. Merely noting the importance of "incentives" or "levers to achieve responsible action" leaves unanswered two critical questions:

- What are the levers to action available to voluntary programs to induce participation and create commitment?
- Which of these levers, or combinations of these levers might be expected to be most critical for effective policy?

To begin answering these questions, it is useful to recall Chapter One and the concept and terminology of "assisted corporate social responsibility." The levers to action this section shall investigate function as "structures and mechanisms" to elicit responsible actions from firms. The nature of these levers is determined by the characteristics of the terrain or policy space in which they operate. This "assisted social responsibility space" has three characteristics or components which can provide levers to responsible action for voluntary programs: profit-undifferentiated situations, profit-positive situations, and extended profit accounting situations.

**Profit-Undifferentiated situations.**

The term "profit-undifferentiated" originates with Stone, who notes that the choice between profit and socially responsible action so often highlighted in the ACSR literature is quite often a fiction. There are, he notes, "many occasions when managers have no 'most profitable' option on their desks. Considering the uncertainties in any business environment and the limited data available to it, there will be some range of choices all equally consistent with that ill-defined and elusive favorite of economics textbooks, the investment uniquely calculated to maximize the shareholders' wealth [under standard accounting rules]."

In these situations, then, business can do more than just flip a coin to decide between essentially equally attractive financial alternatives. Profit-undifferentiated alternatives can be evaluated on the basis of social criteria (as Stone says, "moral differentiation."). Performing such moral differentiation requires a commitment from management and/or outside incentives. This is so for several reasons:

- The technical capacities which support business decision-making are well-suited to calculate potential profits, but far less well-suited to calculating potential social welfare effects of corporate action. Businesses may not have the information or be able to define the terms upon which a "moral differentiation" could be made.
- Profit-maximization as a cause of action provides a legitimacy that moral differentiation does not within the "rhetoric of motive" in which business decision-making is conducted. A language of moral legitimacy is necessary to compete with the language of profit

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56 Stone, p. 568

4 The second of these reasons listed I attribute to Stone. The first, relating to organizational capacities, seems implicit in his argument but is not explicitly stated. See also Browne and Ciampietro, who note "managers are overwhelmed by a literature of conflicting advice, though each piece of advice is, in itself, consistent with social responsibility as its proponent understands that concept." (p. 567)
legitimacy in these situations. Otherwise, "there will be a tendency to underestimate the full range of profit-indeterminate outcomes — that is, for the participants to force choices into profit-rankings that is not really warranted by the quality of the information on hand."57

Profit-Positive Situations
The term "profit-positive" refers to those fortuitous situations in which socially responsible action clearly is profit-maximizing behavior under standard accounting rules.58 (An example in the environmental area might include a process change which eliminates a toxic byproduct, reduces use of source materials, and saves the firm money.)

Of course, if a situation is profit-positive, one might reasonably ask why would a firm would require the application of an outside lever to take advantage of it. Why, in short, would a firm demonstrating pure ACSR behavior not be "responsible" in these situations?

There are several possible impediments to a firm's pursuit of a profit-positive course of "responsible action:"

- Information necessary to understand the cost-saving action may not be readily available
- The area in which the action occurs may exist in an "organizational blind spot" — an area unlikely to come to the attention of senior management without outside assistance. Facilities maintenance practices, or office supplies requisition are two possible examples of areas in which significant cost-saving, pro-environment improvements are possible — but which are also "low priority" and unlikely to receive decision-making attention from senior management.

Extended Profit Accounting Situations
The third characteristic of assisted social responsibility space relevant to incentives to volunteerism is "extended profit accounting" situations. Situations involving extended profit accounting are those in which the firm operates under extended (usually informal) rules of benefit/cost accounting which allow it to take a broader view of profit-maximization than do standard accounting rules. The firm therefore acts in its enlightened self-interest, sometimes incurring an accounting cost definitely above narrowly profit-maximizing behavior59 to achieve benefits or avert costs not captured under standard accounting rules.60 Within the environmental area, extended profit-accounting situations have one or both of the following aspects: market effects of public perception, and regulatory agency interaction.

Market Effects of Public Perception
An important insight into the broadening market impact of public perception of the firm is gained by recalling the evolution of legal restrictions placed on the social responsibility of the corporation (See Chapter One). From a strict quid pro quo benefit requirement for contribution to social causes, the law has evolved to incorporate an enlightened self-interest perspective, acknowledging that corporate acts which may garner public good will but no directly calculable

57 Stone, p. 569.
58 The rhetoric of the day would have us believe that it is almost always possible to achieve environmental (or other social) goals in such a way that both business and society at large benefit. The Environmental Protection Agency's strategic plan speaks of "harmonizing environmental protection and economic growth;" the cabinet-level National Science and Technology Council, in its environmental technology strategy document, writes: "environmental technology offers a win-win opportunity for our nation and the world..." (NSTC, p. 2) As supported by the previous discussions of ASSR and ACSR, the coincidence of profit-maximization and corporate social responsibility is by no means 100 percent.
59 That is, profit-maximizing as determined under standard accounting rules.
60 Much effort is currently being expended to develop frameworks for placing some of these informal extended rules within formal accounting frameworks. Full cost accounting, which attempts (among other things) to capture the downstream environmental costs incurred by the firm, is one example of such an effort.
benefit are within the allowable discretion of management. Indeed, many states, have passed
“other constituency statutes” which give legal authority for corporations to perform
discretionary acts in the interests of the public, the community, etc. — rather than only the
shareholders. The evolution of the law recognizes a social reality: public goodwill is often a
necessary condition for doing business.

Of course, it has always been true that “although the corporation pursues hard economic goals
headed by profit, it lives and breathes in society.” One might well ask why the law has
changed and whether practicing “enlightened self interest” requires greater attention to the
appearance or fact of socially responsible action than previously:

It seems clear that corporations are regarded less public goodwill than in the past: “As late as
1968, when a Yenkelovich survey asked whether business strikes a fair balance between profit
and public interest, 70% answered yes. By [1979] the yes vote was down to a mere 19%.”
A large part of such suspion is certainly linked to well-publicized environmental and public
health disasters linked to well-known corporate names, such as the Exxon Valdez oil spill, the
Dalron Shield controversy, the Bhopal gas leak, and, on a smaller scale, the “exploding gas
tanks” of GM pickup trucks, etc. Gertler notes that the corporate downsizing and reduction of
employee benefits and employment security which marked the latest recession (and seemingly
the recovery as well) has eroded corporate credibility and created a store of public ill-will.
Finally (but not exhaustively) on the environmental side, right-to-know laws have made
details of corporate environmental performance generally available to public interest groups
through instruments such as the Toxics Release Inventory. This has put firms under greater
scrutiny and created a greater awareness of current practices, leading to increased pressure for
better environmental action.

This increase in public skepticism and suspicion of corporations as good social actors in general
has increasingly been coupled to consumer discrimination on the basis of the perceived social
responsibility of individual corporations. “Responsible investing” targets capital to firms
which engage in “responsible business practice;” “green buying” is used to describe consumer
preference for environmentally preferable products; the list goes on. The bottom line:
corporations have a greater need than previously to demonstrate social responsibility for
market advantage or to compete successfully; in the environmental area, this translates into
a need to appear “green.”

Regulatory Agency Interaction

In addition to being under increased pressure to demonstrate their good action to the public,
a convincing argument can also be made that firms have an important stake in demonstrating
their “responsibility” to regulatory agencies such as the EPA. This is so for several reasons:

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61 McDonald, p. 206
62 Nickel, p. 126
63 Gertler, pp. 259-278
64 For a general description of “greening market pressures,” see Smith and Chahan, “The Greening of
Corporate America,” p. 96 – 103.
65 Of course, “greater need than previously” does not translate into a market situation completely dominated
by socially responsible concerns. Epstein et al attempt to quantify the degree of accountability for
corporate ethics (an element of social responsibility) which shareholders are prepared to accept/enforce.
They conclude “some shareholders may be willing to tolerate profitable unethical behavior. However, the
majority (58%) would sacrifice profits for ethical behavior and most would prefer at least limited
disclosure about ethics in the annual report...” (Epstein et al, p. 452). 58 percent is hardly a resounding
majority. And as Stone notes in a discussion on this issue: “it strikes me as stupendously naive to expect
that the common shareholders, if only we would restore them to a position of electoral control over
management, would exorcise whatever shady practices have been lining their pocketbooks.” (Stone, p.
558). So there certainly are constraints on market pressures for CSR behavior. The point here is simply
that such pressures are larger than they have been in the past.
• Agency enforcement resources are limited, and enforcement efforts are less likely to be targeted at those who are perceived to be good actors; further a firm which is otherwise seen as responsible might experience greater leniency when found to be in violation on a particular point.  

• Firms are often anxious to avoid new regulation, and are aware that such regulation is largely reactive. Firms or industries may feel that they can forestall regulation by establishing records of responsible action.  

**Mapping the Assisted Social Responsibility space leads to levers for responsible action**

The discussion so far has led to the mapping of a the portion of the space in which assisted social responsibility operates relevant to voluntary programs. As has been shown, this space is characterized by:

• Profit-undifferentiated and profit-positive situations in which responsible actions may be pursued without cost or to the benefit of the bottom line, under standard accounting rules, and by the

• Dynamics of the relationships between corporations and the public and regulatory agencies which create increased pressures to engage in socially responsible behavior, and which firms account for under extended assessments of costs and benefits of their behavior.

The motivation for discussion of this space was the hypothesis that within it are the non-statutory levers that voluntary programs can utilize to attract participants and create commitment. The argument now turns to an examination of these levers.

**Levers in Profit-Undifferentiated Situations**

Recall that the impediments identified to socially responsible action in profit-undifferentiated situations were two:

• Lack of organizational capacity to engage in “moral differentiation,” and

• Lack of legitimacy of non-profit-maximizing decision modes.

Levers to responsible action aimed at overcoming these impediments (and therefore encouraging what Stone calls “moral differentiation”) can be characterized as follows:

• **Increasing technical capabilities to make decisions on non-profit-maximizing terms in particular situations.** This might include provision of information and technical assistance to the firm by outside actors, or by effecting increased commitment (measured in person-hours or other resources dedicated) to alternate modes of decision-making.

• **Provision of legitimacy to decision making processes not rooted in strict profit-maximization.** This has two aspects: (1) provision of a framework or clear guidelines on the “proper” act of moral differentiation in a particular situation (recall the ACSR argument that business is not equipped by tradition or nature to engage in “moral differentiation” beyond that provided by the market); and (2) linking decisions of “moral differentiation” to extended notions of costs and benefits beyond traditional accounting rules. Such linkage might be accomplished by providing mechanisms for public recognition of “responsible

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44 It should be noted, however, that the balkanized nature of the EPA puts limits on such efforts. Since the air office is separate from the water office, for example, “beyond compliance” activities to reduce air toxics might not gain a firm any breathing room if non-permitted emissions are discovered to the sewer system.

47 Like enforcement resources, the EPA’s rule-writing resources are also limited. Numerous examples exist of where the EPA has only issued regulations under a pre-existing statutory authority after pressure arising from Congress or a lawsuit alleging corporate bad actorship in a particular area.
action,” or through the implication that a regulatory agency would view a particular course of action as evidence of “good actorship.”

**Levers working on Profit-Positive Situations**

As is the case for profit-undifferentiated situations (above), levers acting in profit-positive situations follow directly from the obstacles identified to “responsible” corporate action in this area. They can be described as follows:

- **Opening access to senior management.** As noted previously, responsible courses of action can exist in areas or situations where senior management, which has the capability to implement important process or practice changes, is unlikely to involve itself. Outside agencies, by bringing the issue to management’s attention and in presenting a framework for action (i.e. clear guidelines), can command the attention of decision-makers. This is attention is heightened when linked to extended notions of costs and benefits. Again, this linkage may be accomplished by third-party recognition of responsible action or through the implication that a regulatory agency would view the course of action as evidence of good actorship.

- **Increasing technical capabilities.** As noted above in the section above, firms may not have the knowledge or ability to recognize or evaluate alternative processes and practices. Provision, for example, of information and technical assistance may help firms recognize cost-saving opportunities for responsible action.

**Levers working on extended profit accounting situations**

Extended profit-accounting situations, as they have been described, have three elements:

- Understanding the market rewards of being seen as a responsible corporate actor (or, conversely, market penalties for being seen as irresponsible)

- Understanding the benefits of demonstrating responsible behavior to regulatory agencies

Levers designed to elicit responsible action under these two elements would act in the following ways:

- **By reducing the uncertainty and ambiguity** which face a firm in deciding how to demonstrate that it acts in “socially responsible” ways. This is accomplished by providing guidelines or otherwise clarifying what constitutes responsible action in particular situations or areas. This provides a standard against which the social responsibility of the firm can be judged, as well as focusing and providing the groundwork for the decision-making process inside the firm which must balance strict profit-maximization and its enlightened self-interest.

- **By providing avenues for third-party public recognition.** Third-party recognition of responsible action provides a means to validate a firm’s actions and increase its credibility as a responsible actor. This in effect “amplifies” those actions which the firm takes, providing perhaps more market advantage for the same level of effort.

- **By creating explicit avenues of agency access.** The fact that a voluntary program exists indicates that that it works towards a goal which the agency finds important. This carries an implication that those participating in the program will be perceived as good actors by the agency. Making this implication more concrete by proving access to the agency, and in particular to the regulatory process, as a benefit of program participation will likely provide increased incentive for participation and commitment.

**Integrating the Pieces**

Having examined the levers to responsible action which arise out of the three components of assisted social responsibility space for voluntary programs, it is apparent that there are
significant overlaps and linkages. Many of the levers can serve more than one objective; others create links between the component areas. This should not be surprising given the interrelationship between the component areas. As Stone notes, for example of the linkage between profit-undifferentiated situations and extended-profit accountability situations: a firm's willingness to practice “good citizenship” with respect to profit-undifferentiated alternatives may well gain it public credit and market advantage.  

Again, it is useful to present the argument thus far graphically:

**Assisted Social Responsibility Space for Voluntary Programs**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• insufficient technical capacity and information</td>
<td>• insufficient technical capacity and information</td>
<td>• market effects of public perception</td>
</tr>
<tr>
<td>• legitimacy of moral differentiation</td>
<td>• low-priority areas for actions</td>
<td>• regulatory agency interaction</td>
</tr>
<tr>
<td></td>
<td>• technical assistance and information provision</td>
<td>• reduce ambiguity and uncertainty; particularly through providing clear guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• create avenues for third-party public recognition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• create avenues for agency access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• legitimizing moral differentiation by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—providing clear guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—gaining attention of decision-makers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—creating links to extended costs/benefits</td>
</tr>
</tbody>
</table>

Key:
1 component of assisted social responsibility space
2 barriers to/ opportunities for responsible action
3 levers arising out of barriers and opportunities

**Figure 3.1: Incentives/levers model for voluntary programs**

**Voluntary programs as frameworks to apply levers**
Levers for voluntary programs to use in building participation and commitment to elicit responsible corporate behavior have been identified. The existence of the levers, themselves, however, is insufficient. If they are to be used to achieve environmental goals, there must be a structure or framework which integrates them and allows them to be applied. It is useful and convenient to understand voluntary programs as such frameworks. And in constructing and evaluating such frameworks, we might well ask whether we have a priori reasons to expect that certain levers or combinations of levers are more important than others, or whether the efficacy of certain levers is context-dependent in unexpected ways.

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Stone, p. 569
Contributions from the Literature of Self-Regulation

The literature of self-regulation provides some insights into these questions. This literature deals in the main with the conditions under which firms are likely to adhere to legally binding standards of conduct which are not explicitly regulated. (For example, a legally binding standard of non-discriminatory hiring practices could exist without detailed regulation specifying the structures and processes by which firms should meet the standard.) This idea of voluntary compliance is obviously somewhat different from the situation of voluntary programs, which exist to achieve goals where there are no statutory requirements. However, the question at the core of the self-regulation literature is both familiar and directly relevant to the discussion of this chapter: “how can socially responsible behavior be elicited from firms without direct regulation?” What, then, does this literature tell us?

Clear, measurable standards of “responsible action”

The self-regulation literature makes clear the importance of enumerating clear standards of responsible action with measurable goals in the particular context with which one is concerned. As Blumrosen notes in the context of employment discrimination, “Under the earlier view [which was a very vague definition of non-discriminatory practices], it was difficult for an employer to take meaningful voluntary action in any organized way. What was he to do? Say every morning ‘I will not discriminate?’”

Public-Sector role in promulgating standards

Likewise, the literature emphasizes the importance of public-sector promulgation of these standards: “the [affected] community may participate. . . in the development of these standards, but the crucial act of promulgating and providing an authoritative basis for these standards must be performed by government if meaningful compliance [in our terms, participation and commitment] is to be expected.” And in a slightly different context, Maitland emphasizes the role of industry-wide institutional arrangements in securing corporate responsible action.

The Strength of the Lever Depends on the Fulcrum.

The diagram of the levers presented above (fig 3.1) makes clear that those levers which work in the sub-areas of “market effects of public perception” and “regulatory agency interaction” are critical. Levers functioning in both profit-undifferentiated and profit-positive areas have strong ties to these areas; a great deal ultimately depends on being able to appeal to a corporation’s enlightened self interest as embodied in the broad view of costs and benefits taken by extended profit accounting.

To extend an analogy, levers in these areas turn upon fulcrums, and it is these fulcrums which in large measure determine the strength of the lever. In the area of “market effects of public perception,” corporate behavior can be influenced to the extent that corporations believe public opinion will matter to their market activities. The strength of public insistence on “green behavior” (and the extent of the public’s access to information which allows behavior to be judged) is thus the “fulcrum” of these levers. In the area of “regulatory agency interaction,” firms can be diverted from narrowly profit-maximizing behavior to the extent that they feel that staying “on the good side” of the agency is important. In a very real way, then, the success of a non-regulatory lever depends on the vigor with which the regulatory agenda of the agency is pursued.

49 Blumrosen, p. 1268
50 Blumrosen, p. 1268
51 Maitland, p. 132 – 147
Conclusions

In addition to having a “laundry list” of levers for eliciting responsible action, some ideas about how these levers may be applied successfully have now been developed: There is strong reason to believe that successful voluntary programs incorporate clearly stated, well-articulated courses of action with measurable endpoints. The limits to effectiveness of voluntary programs operating in extended profit accounting situations can in large part be understood as a function of public interest and the vigor of the regulatory activities of the agency.

This discussion of employing levers for maximum effect points to an interesting effect: those voluntary programs which employ these levers most successfully to secure participation and create commitment are least voluntary. The American Heritage Dictionary presents “strong” and “weak” definitions of the word “voluntary.” (Strong) “Acting, serving, or done willingly and without constraint or expectation of reward;” and (Weak) “Capable of making choices; having the faculty of will.” The more successfully levers are employed the greater the firm’s perceived reward for altering its behavior or the greater its perceived loss if it fails to. This is not a situation of action undertaken “without constraint or expectation of reward.” Rather, effective employment of levers for responsible action is more likely to place participants in the weak definition of “voluntary” — firms have the faculty of will and may decide whether to participate, but the decision is highly constrained.

Is this situation of “non-voluntary volunteerism” necessarily bad? No. Effecting change in corporate behavior requires effective behavioral instruments. Is it significant? Yes. Because taking the word “voluntary” at its usual face value leads to misunderstanding about the nature of successful voluntary programs.

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72 Rewards aside, there is certainly a constraint issue. Consider the reactions of a number of corporations to proliferation of uncoordinated voluntary programs within the EPA: these corporations wished to know “which of these voluntary programs are mandatory?” (Personal Interview, Jane McGuire, CEMI)
CHAPTER FOUR: A CROSS-SECTION OF VOLUNTARY PROGRAMS

Introduction.
Attention now moves from the theory to the practice of voluntary programs. Chapters one to three have provided frameworks for thinking about voluntary programs as well as developed hypotheses about their workings, limitations, and conditions for effectiveness. For these frameworks and hypotheses to be meaningful or valid, they must be applied to experience. This chapter presents the experience in the form of six case studies; the next chapter constitutes the application.

As the chapter's title indicates, the intent is to present a representative cross-section of case-studies; it was this requirement which in many ways posed the most problems. An exhaustive approach, though no doubt preferable, was out of the question; the Environmental Protection Agency is now estimated to have nearly 30 voluntary programs; more are announced monthly. A set of criteria were therefore established and a set of voluntary programs chosen which, when characterized by these criteria, seemed to capture a good deal of the diversity which exists among voluntary programs (see below). Inevitably, however, personal judgment played a significant role in program choice.

Focus of Information-gathering and Presentation of Case Studies:
Based on arguments developed over the previous chapters, general research in the theoretical literature and preliminary telephone interviews, information-gathering for the case studies focused on six areas. The presentation format of the case studies is segmented to reflect these foci:

<table>
<thead>
<tr>
<th>Information-Gathering Area</th>
<th>Corresponding Section in Case-Study Write-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Out of the definition of policy developed in Chapter One, the goals and methods of the program. The goal is defined as the <em>environmental goal</em> which the program hopes to achieve. The method is how, s, broadly speaking, the program attempts to attain the goal.</td>
<td>Goals.</td>
</tr>
<tr>
<td>• The nature of the program’s interaction with its participants (alternately, responsibilities and benefits of membership).</td>
<td>Program/Participant Interaction (Responsibilities and Benefits of Membership)</td>
</tr>
<tr>
<td>• The origin of the program, including impetuses, EPA motivations in creating and implementing it, and key actors.</td>
<td>History.</td>
</tr>
<tr>
<td>• History of program implementation</td>
<td></td>
</tr>
<tr>
<td>• How the program is situated within the agency and within an existing statutory framework and current</td>
<td>Institutional and Regulatory Context</td>
</tr>
</tbody>
</table>
policy directions of the agency

- Methods by which the program evaluates its success against its goals, along with possible limitations of these approaches

- Other information of possible interest

<table>
<thead>
<tr>
<th>Figure 4.1: Information-gathering categories for case studies</th>
</tr>
</thead>
</table>

**Choice of programs: Diversity in Characteristics.**

As noted above, programs were chosen in an attempt to present a representative cross-section of voluntary programs within the EPA. Factors included were:

- Media affected (air, water, ground, multi-media),
- Community targeted (producers, users, industry, facility owners)
- Size and longevity of program (large staff/small staff; well-established/in development)
- Types of interaction between programs and participants (recognition only, recognition and technical support)

**Table of Comparative Characteristics for Case-Study Programs**

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Media affected</th>
<th>Community Targeted</th>
<th>Size/Longevity</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lights</td>
<td>Air (Climate Change Gases)</td>
<td>Firms, institutions, etc. who have control over facilities</td>
<td>large/one of 2 oldest programs</td>
<td>recognition &amp; extensive technical support (plus profitability)</td>
</tr>
<tr>
<td>33/50</td>
<td>Air (Air Toxics)</td>
<td>Emitters (Firm-level)</td>
<td>medium (small headquarters staff plus regional coordinators) / one of 2 oldest programs</td>
<td>recognition (note also parallel credit under early reductions provisions of the 1990 Clean Air Act Amendments)</td>
</tr>
<tr>
<td>Building Air Quality Alliance</td>
<td>Air (indoor air quality)</td>
<td>Facility Owners and managers</td>
<td>small/yet to be formally launched</td>
<td>recognition, improved tenant relations, possibly reduced liability</td>
</tr>
<tr>
<td>WasteWise</td>
<td>Ground (Municipal Solid Waste)</td>
<td>Fortune 1000 firms</td>
<td>small (3.5 headquarters staff, plus contractor support)</td>
<td>recognition and some technical support</td>
</tr>
<tr>
<td>Pesticide Environmental Stewardship Program</td>
<td>multi-media producers and users of pesticides</td>
<td>small but growing not yet fully operational (use stewardship plans now being formulated)</td>
<td>not yet formulated</td>
<td></td>
</tr>
<tr>
<td>Water (Air pollution prevention through energy savings)</td>
<td>hotels and motels (facility owners)</td>
<td>small headquarters staff, significant contractor technical support. new, just coming into full operation</td>
<td>recognition, technical support (plus profitability)</td>
<td></td>
</tr>
</tbody>
</table>

**Sources of Information for Write-Ups**
Information in the six write-ups which follow come from program and third-party literature, as well as phone and personal interviews. An effort has been made to footnote quotations and unique information; in general each write-up represents the assemblage of a number of separate sources. The bibliography may be consulted for a complete list of information sources. While every effort has been made to ensure accuracy and balance, each write-up is necessarily influenced by the author's judgments about what information should and should not be included. *Except where specifically footnoted or indicated*, the views presented in these write-ups should not be attributed to the voluntary program staff members interviewed for the different programs.

**Green Lights Program**

**Goals.**

Green Lights exists to reduce atmospheric pollution associated with the energy consumed by lighting. This is accomplished through partnerships in which businesses commit to profitable lighting efficiency improvements in return for recognition and technical support. (Energy efficiency is a desired goal as energy conserved over the life of an efficient lighting system or lighting component translates into emissions savings from utility generating plants. CO\textsubscript{2}, SO\textsubscript{2}, NO\textsubscript{x}, and heavy-metal emissions reductions are considered.)

The long term goal of Green Lights is to institutionalize energy efficiency and consequent emissions savings by creating self-perpetuating, customer-driven demand for energy-efficient lighting products.

**Program/Participant Interaction: Responsibilities and Benefits of Participation.**
Participants are divided in partners, allies and endorsers.

- **Endorsers are professional, educational and trade associations, as well as non-profit advocacy groups who agree to promote the concept of energy-efficient lighting to their members.**
- **Allies are electric utilities, lighting manufacturers and associated firms in the lighting field. “Allies agree to work to promote the benefits of energy-efficient lighting to their customers and employees.”**

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71 Green Lights, “Introducing the Green Lights Program,” 2
Partners are the heart of the program. The category can include corporations, state and local governments, federal agencies, educational institutions, NGOs, etc. Through signing a Memorandum of Understanding (MOU) with EPA, partners agree to: (1) survey 100% of their lighting facilities, (2) upgrade 90% of these facilities within 5 years where it is profitable to do so and where lighting quality is not compromised, and (3) to appoint a Green Lights implementation manager and report at least annually to EPA on progress made. In return, the Green Lights program offers extensive technical support, including analysis software, workshops, and product databases. Partners also may use the Green Lights logo, and EPA agrees to generate specified kinds of publicity about the program and Green Lights participants.

The MOU is a "voluntary agreement... [which] can be terminated by either party without penalties or liability to either party." Withdrawals from the MOU are not to be publicized. Conditions which could cause EPA to terminate the MOU with a partner are given as a partner's:

- Failure to provide annual report
- Failure to make adequate progress on lighting upgrades, to "the point where it is evident that Partner will not be able to fulfill its upgrade commitments as stated in this MOU"
- Inappropriate use of Green Lights logo.

History.

Green Lights was officially launched on January 16, 1991, and is generally acknowledged as one of the two "original" voluntary programs (33/50 being the other). Its origins begin some two years earlier, however:

In Mid-1989, then EPA Administrator Reilly withheld two percent of budgeted allocations from all offices within the Agency, the money saved to be awarded on a competitive basis to pollution prevention projects. The first Green Lights proposal, written by Robert Kwatin and his supervisor within the Office of Air and Radiation Section, John Hoffman, was rejected for these pollution prevention funds. After some revision, approval was eventually gained within EPA and the program was launched.

December 1991 saw 1.5 billion square feet of facility space enrolled; that figure doubled a year later. Currently, the program has about 1700 participants and approximately 4.5 billion square feet committed, representing about 5 percent of the eligible square footage nationally. However, completed upgrades amount to about 10 percent of this — 450 million square feet. The "trick now," notes a Green Lights official, "is actually getting participants to fulfill the terms of their MOU." Staff believes this is not a reflection of companies treating their commitment casually — 95 percent of participants don't sign an MOU unless they know exactly what they are getting into" — as much as it is a reflection of early response to the program outstripping agency resources. An implementation team was not part of the original Green Lights resource allocation; one was added when it was realized that commitment alone was a necessary but not sufficient condition for implementation. Implementation in the first years was therefore slower than it would otherwise have been.

Institutional and Regulatory Context.

Green Lights exists within EPA's Atmospheric Pollution Prevention Division (formerly the Global Change Division) within the Office of Air and Radiation. This division is home to 11 voluntary programs, all focused on achieving energy efficiency improvements in:

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24 Profitable is defined as a project which has an annualized internal rate of return of at least 20 percent.
25 Green Lights, Sample Memorandum of Understanding, p. 1
26 Green Lights, Sample Memorandum of Understanding, p. 17
27 McGuire et al, p 18
28 Geoffrey Brown, personal communication
• Lighting (green lights)
• Business machines (energy star computers, printers, monitors)
• Appliances (golden carrot incentive programs)
• Commercial buildings (energy star buildings)
• And other areas

Green Lights is generally considered to be the flagship program within the Division. Total division personnel include approximately 90 headquarters staff, plus contractor support. An eventual goal is to integrate Green Lights with energy star — that is, Green Lights partners would install Energy-Star compliant lighting systems, as well as Energy Star HVAC equipment, Energy Star office equipment, etc.

Lighting efficiency or the energy efficiency of buildings, appliances, or office machines in general is largely unregulated.

Measures of Program Achievement.

Green Lights requires extensive data collection of its participants through standard reporting forms and, on this basis, calculates emissions reductions achieved (based on an average generating mix by region) and energy conserved. The program is acknowledged to have the best self-evaluation mechanisms of any of the voluntary programs. (Note, however, that 33/50 tracks itself through TRI, see next case).

The program was founded, however, with the intent of “getting customers to lead the market” (to create demand for energy-efficient products) and progress on this score is more difficult to measure. It is probably too early to judge whether a market transformation is underway; though Green Lights’ information-gathering activities should allow eventual quantitative judgment of the program’s ability to transform the market. At present, there is the qualitative assessment within the program that Green Lights is “the most innovative thing to happen to the lighting industry in a long time,” and noticeable results in a few lighting equipment areas: Sales of occupancy sensors have increased dramatically, for example, and a large part of the increase may be attributed to Green Lights upgrade projects.

This begs the question — if Green Lights does transform the market by bringing 25 or 50 percent of eligible space into the program, will it have rendered itself obsolete? An official notes that this might be the case, if technology remained static; in the face of changing lighting technologies, he believes the program faces a challenge of effecting continuous improvement and “pushing the energy efficiency envelope of the marketplace.”

Notes.

Green lights is promoted as being a good business decision that is also good for the environment; program literature advertises usual internal rates of return for lighting upgrade projects of 20 - 40 percent. “We want to tell [potential participants] that ‘this is money you are wasting today,’” says a Green Lights official. Given this, a reasonable question might be: “to what extent would Green Lights participants do these upgrades without the program?” Green Lights has several answers to this:

• The first is their own experience with the need for an implementation team — that even so narrow a field as lighting is technically complex and information sources are atomized. In this context commitment to energy efficiency itself is insufficient.

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79 Michael Mason, personal communication
80 Geoffrey Brown, personal communication
81 Geoffrey Brown, personal communication
82 Geoffrey Brown, personal communication

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• Facilities are “unsexy” areas and decision-making is consequently at a lower management level on nothing more sophisticated than a pay-back basis. Green Lights provides a vehicle for making facility decisions a priority at higher levels of management, where innovative decisions are possible.

The 33/50 Program

Goals.
33/50 was created bring about “accelerated reductions in the amount of environmental releases and transfers of specified toxic chemicals through voluntary [corporate] action.” Specific to the program targets 17 toxic chemicals; the 33/50 name reflects an interim national goal of a 33 percent reduction in releases and off-site transfers of these substances for 1991 and a final goal of 50 percent reduction by 1995, as measured against a baseline year of 1988. Reductions are achieved through voluntary corporate commitments in return for public recognition. The emphasis is on achieving reductions through source reduction and in-process recycling; nonetheless, reductions achieved through other means (e.g., on-site treatment) are acceptable.

Program/Participant Interaction: Responsibilities and Benefits of Participation.
Participating companies “sign on” to 33/50 by sending a letter of intent to EPA “stating a corporate-wide numerical reduction goal for the sum of 17 target chemicals... this numerical commitment is the sole requirement for participation in the 33/50 program.” 33/50’s numerical goals are national aggregates and therefore each participating company or corporation has discretion as to which chemicals it shall target and the magnitude of reductions it shall set. No penalties accrue to firms not meeting their targets.

The program generates progress reports and press releases as a means of recognizing participants; technical information is available through the EPA’s Pollution Prevention Information Clearinghouse and other Technical Assistance Services. The 33/50 program itself does not provide technical support.

History.
Like the Green Lights program, 33/50 had its genesis several years before its 1991 launch — and before then-EPA Administrator William Reilly’s September, 1990 announcement of a voluntary 2-tier reduction program for “high priority chemicals” that would stress pollution prevention. Specifically, the program built on a mid-1989 voluntary air toxics emissions reduction agreement negotiated by Reilly with the nine companies under the ARTERIS (Air Toxics Emissions Reductions Inventory System). It was further spurred on by two other events, namely:

• The September, 1990 release of the EPA Science Advisory Board’s report, Setting Priorities and Strategies for Environmental Protection. The report both highlighted the risk posed by toxic chemicals and emphasized source reduction as the preferred risk-reduction option.

• The debate over and passage of the 1990 Pollution Prevention Act; whose stated goal was to...  

After Reilly’s announcement, the specific chemicals to be targeted by the program were chosen through an agency-wide process, focusing on the following criteria:

• That they present serious environmental and public health concerns

• That they be high-volume industrial chemicals with significant releases

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83 INFORM, 492
84 33/50, “Questions & Answers about the 33/50 program”
85 33/50, “EPA’s 33/50 Program: A Progress Report,” and INFORM, 494
• That emissions of these chemicals could be reduced through pollution prevention
• That they also be regulated under the 1990 Clean Air Act Amendments (see “Legislative Framework, below.)

Using TRI data (see “Institutional and Regulatory Context,” below), EPA identified the companies responsible for the largest emissions and transfers of the target chemicals. The CEOs of the “top 600” companies so identified, accounting for 75 percent of these releases and transfers, were solicited to join the program in January 1991. Of these 600, 322 committed to the program within two months. Subsequent solicitations gained a total of 1,242 participants (representing 15% of the eligible pool) by May, 1994.

Institutional Context and Regulatory Context.
The 33/50 program is situated within the Environmental Assistance Division of the Office of Pollution Prevention and Toxics. As noted above, the program enjoyed strong support from the administrator’s office at its inception.

33/50 exists beside a complex legislative framework. All 17 of the target chemicals are covered by the Clean Air Act Amendments of 1990 and are reported in the Toxic Release Inventory (TRI):

The 1990 Clean Air Act Amendments establish a 10-year schedule for implementing “Maximum Achievable Control Technology” (MACT) standards to control emissions of 189 air toxics. All 17 of the 33/50 target substances are included in this list of 189. The “Early Reductions Provision” of the Amendments (USC 42 § 7412 (i)(5)) provide a way to obtain a six-year extension on compliance with the MACT standards; to obtain the extension, sources must achieve a 90 percent or greater (95 percent for particulates) reduction of air toxics. This 90/95 percent requirement results in emission levels still likely to be significantly above MACT standards. Reductions achieved under the 33/50 program are not inconsistent with the 90/95 requirement.46 This provides some emitters with a significant parallel incentive to make early reductions also targeted under 33/50.

Law also mandates that firms handling/processing/transferring more than a specified amount of a number of listed substances report the quantities of their releases and transfers to the EPA (42 USC §11001-110050, the Emergency Planning and Community Right-to-Know Act) The Toxic Releases Inventory (TRI) is the public report which is compiled from these reports. EPA’s mandate to make TRI publicly accessible and the Inventory’s identification of releases by firm as well as in aggregates, has made it much easier for advocacy groups to track the environmental performance of firms. Many argue that this has created pressure on firms to reduce TRI emissions, from without as well as within. Again, all 17 of the 33/50 target substances appear in the TRI.

Measures of Program Achievement.
33/50 is one of the most-publicized and probably the most-documented of the voluntary programs. EPA uses the TRI data to track the program in two specific ways:
• Calculating overall reductions in releases and transfers of the 17 target chemicals
• Comparison of aggregate releases from facilities of participating parent companies with aggregate releases of non-participating parent company.

By these measures, 33/50 has met its interim 33 percent national goals and seems certain to meet its final 50 percent goal for 1995. Evaluating “by the numbers,” however, has possible shortcomings:

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46 33/50, “Summary of Proposed Rule. . .,” p. 8

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• It does not provide a measure of emissions reductions achieved through source reduction, a major goal of the program.

• It does not directly differentiate between reductions due to the program and those that would have occurred anyway.

• It does not evaluate the value or existence of a “paradigm shift” towards collaboration and away from adversarial legalism in the interaction between the EPA and the private sector; nor does it evaluate the program’s value as a setter of national priorities for early reductions.

• TRI data is released two years after emissions actually occur; although the program is reaching its conclusion, it may only be evaluated to its midpoint at the present.

A number of evaluations of 33/50 have been performed to date, including two by the Government Accounting Office (GAO), and one by INFORM at EPA’s behest. Based on 1992 TRI data (the 1993 data was released in March 95), the INFORM report seeks to address, among other concerns, the first two issues outlined above. Statistical methods were employed to discriminate between reductions attributable to the 33/50 program and reductions not so attributable. Survey methods were employed to distinguish between reductions achieved through source reduction and those achieved by end-of-pipe methods. Findings in brief were as follows:

• source reduction has not been the dominant mode of emissions reduction. Rather, reliance has been more on end-of-pipe treatments, on-site recycling and energy recovery. Further, for facilities where substantial source reduction did occur, emissions reductions were not significantly different for 33/50 program participants and non-participants.  

• However, 33/50 commitment seemed to stimulate reductions outside the program’s intended scope of commitment, and the program attracted companies which had previously been lukewarm in their emissions reductions efforts — but “added reductions achieved by facilities covered by a commitment to the 33/50 program do not appear to be much greater than reductions that would have occurred had the program not existed at all.”

Inform notes, however, that using the 1992 data necessarily makes the report of a somewhat preliminary nature. This sentiment is echoed by others, noting that the 1992 data represents much less than two years of the program’s existence, with a large portion of that time representing a start-up phase. And in contrast to INFORM’s findings, the 1993 TRI report notes, “between 1992 and 1993, facilities owned by companies participating in the 33/50 Program reported the highest reduction levels and accounted for most of pounds of 33/50 Program chemical reductions. Between 1992 and 1993, facilities owned by participants reduced releases and transfers of [these 17 chemicals] by 20 percent. The rate of reduction achieved by facilities owned by non-participating companies was 0.6 percent.”

It seems comprehensive evaluation must wait until 1995 TRI data is available in two years.

Notes.
The final 50 percent national goal for 33/50 is to be met this year, marking the end, at least, of this phase of the program. As of this writing, a comment period to solicit suggestions for the program’s next phase (33/50: The Next Generation) — and whether there should be a next phase — has recently drawn to a close. Currently, three major “categories” of a Next Generation program are under consideration.

87 INFORM, p. 499
88 INFORM, p. 500
89 EPA, “1993 TRI Reporting Profiles for 33/50 Program Chemicals”
90 Mike Burns, Personal Communication
• Next Generation as current 33/50 program look-a-likes: either the same chemical list and new target years approach, a new target chemical list, or a continuous-improvement and expanding list approach.

• Next Generation with No New National Lists (e.g., reduce all TRI chemicals, have sectors identify their own sets of target chemicals, or location-specific targets set with the assistance of citizen advisory groups.)

• Next Generation as a Waste-Based Program. Shift focus from releases/transfers to quantities of chemicals entering/managed in production wastes.

**Building Air Quality Alliance**

**Goals.**
The Building Air Quality Alliance will be a partnership program designed to improve indoor air quality (IAQ) in public and commercial office buildings by promoting and showcasing good IAQ management practices. This is achieved by partnership with facility operators and managers who have implemented the Alliance Action Plan, an 8-step approach to achieving best practicable improvements in IAQ.

**Program/Participant Interaction: Responsibilities and Benefits of Participation.**
Participants will be divided into Alliance Building Partners and Alliance Members.

• Alliance Members are national, not-for-profit organizations, or government agencies (at any level) that “work collaboratively to endorse and comply with the Guiding Principles of the Alliance, use their access to building personnel to recruit Alliance Building Partners, and work together to promote good IAQ management practices in buildings.”

• Alliance Building Partners are building owners/operators who “voluntarily commit to abide by the Alliance Guiding Principles and implement the Alliance Action Plan that will help achieve and maintain good IAQ in their buildings.” It should be noted that Partners must certify (via a signed checklist) that they have implemented the Action Plan as a condition for application; they must also sign a statement of commitment affirming the Guiding Principles. Membership is for one year; renewal would involve submission of an updated statement of commitment and action plan checklist. Unlike Green Lights, the Alliance is on a building-by-building basis; owners of multiple facilities have the option of committing just one to the Alliance.

The Alliance describes benefits of membership as follows:

• Benefits which improved IAQ brings in and of itself: improved occupant health and productivity

• In some cases, reduced operating costs through, for example, proper HVAC maintenance

• Increased marketability of rental space in a building following good IAQ practices

• Liability may be reduced for IAQ-related litigation if a building operator can show that s/he is following “best practices”

• Recognition by the Alliance may give a Partner political capital and goodwill with tenants, employees and the community.

Partners can withdraw from the Alliance at any time with the provision of a written explanation. There are no reporting requirements beyond the yearly renewal “checklist.” Check-ups may identify facilities not maintaining commitments made under the checklist.

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91 Building Air Quality Alliance, “Building Air Quality Alliance...” p. 5
92 Building Air Quality Alliance, “Building Air Quality Alliance...” p. 3

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History.

The Building Air Quality Alliance is a very new program and is, as of this writing, preparing for its formal launch. Its origins lie in Building Air Quality, a guide published out of EPA’s Indoor Air Division in 1991. Interest in the topic of IAQ was confirmed by the guide’s status a GPO bestseller. However, according to an Alliance official, the division knew that an implementation program would be needed — the guide contained a great deal of information but no action plan. Such a program could only be voluntary, as there existed no authority to regulate (see “Institutional and Regulatory Framework,” below).

An initial meeting was held in February 1994, attended by 50 individuals representing various IAQ stakeholders. The idea for a voluntary program was put forward with the question of how such a program should be structured and run. Participants were strongly of an opinion that for a program in this area to work, EPA would have to play a central role. This attitude was contrary to the expectations of the division, which was at that time expecting to set up a program which others would implement. Working groups were formed, materials circulated and comments solicited. A program outline took shape.

A “Reality Check” was held in the summer of 1994; four “test partners” — buildings currently engaging in good IAQ practices — tested the proposed action plan and guiding principles; their comments helped shape the final Alliance formulation.

Formal launch was scheduled for January of 1995. However, in late December, two letters arrived alleging that the Alliance was in violation of the Federal Advisory Committee Act (FACA) and the Paperwork Reduction Act (PRA). The FACA complaint was ruled invalid; the Alliance decided to pursue OMB approval of its application materials to satisfy the formal requirements of the PRA, though no PRA violations had occurred in the process up to that time.93

Rather than satisfying the complainants, these actions on the part of the Alliance seemed to bring precisely the opposite reaction. Lobbying on behalf of the “hospitality industry” on the Hill produced numerous letters and phone calls from members of Congress querying the program’s purpose and reasons for existence. The theme of these queries and complaints was that the Alliance was a backdoor approach to regulation, that it would hurt small businesses as “owners of commercial office space in which bars, restaurants, printers, bakers, and other small businesses are leasing space might require certain criteria — such as restricting smoking — so that the building owner could enroll in the Alliance.”94 The response of the Alliance and EPA to these claims is that the Alliance is voluntary, developed in close cooperation with numerous stakeholders, and intended precisely to avoid imposing “costly and burdensome requirements.”95

Staff notes that others involved in voluntary programs within the agency are “astonished” by the political flak the Alliance has received. At this point, OMB approval for the PRA is expected by May, and official launch of the Alliance is slated for June.

Institutional Context and Regulatory Context.

The Building Air Quality Alliance exists within the Indoor Air Division of the Office of Radiation and Indoor Air. Staff is essentially two individuals.

As noted above, EPA has no direct authority to regulate IAQ. SARA Title IV gives authority to conduct research and disseminate information. OSHA (The Occupational Safety and Health Administration) has authority to regulate and is currently conducting hearings on proposed IAQ rulemaking. (OSHA participated in the Alliance development and “agreed that the Alliance

93 The Paperwork Reduction Act requires Office of Management and Budget Approval for forms which more than 9 individuals or organizations are expected to fill out.
does not duplicate or impede their regulatory process." Interestingly, however, organizations writing to Congress in support of the Alliance cite it as an alternative to "command and control regulation;" the Building Owner's and Manager's Association write "it [the Alliance] will greatly assist us in staving off unnecessary and premature regulations."

Measures of Program Achievement.
As the Alliance has yet to be officially launched, there are obviously no assessments of its success. As noted by Alliance staff, it is difficult to quantify IAQ and its impacts; Numerical evaluations are likely to be particularly difficult since the program concentrates on management practices rather than numerical goals for various air quality metrics. The program plans to track numbers of occupants, buildings and square feet covered by the program.

Pesticide Environmental Stewardship Program
(formerly Pesticide Use/Risk Reduction Initiative)

Goals.
The Pesticide Environmental Stewardship Program (PESP) exists to reduce the risks associated with pesticide use through partnership with agricultural and non-agricultural pesticide user groups. Partners effect risk reduction through adherence to a shared set of principles for good pesticide environmental stewardship and by implementing site-specific stewardship plans based on these principles.

The long-term goal of PESP is to alter the portfolio mix of pesticides being used by institutionalizing good practices with users. This would create market pressure for safer products to enter the market; pesticide manufacturers would face a "safer market" to sell to. This would be accomplished in conjunction with rationalizing and streamlining the current pesticide registration process.

Program/Participant Interaction: Responsibilities and Benefits of Participation.
PESP partners are agricultural and non-agricultural pesticide user groups. Partners endorse the principle that the safest cost-effective pest management practices should be used. In earnest of this endorsement, partners must develop and implement pesticide use stewardship plans specific to their site(s). These plans should be both commodity (crop)-specific and tailored to regional conditions. In general, plans contain the following elements:

- Smarter use of current products
- Fostering/promoting/encouraging adoption of safer pest control technologies (e.g., biologicals and other non-conventional approaches)
- Education and training of members in Integrated Pest Management techniques
- Research and demonstration programs

Partners are expected to report regularly on their implementation progress.

Each partner is assigned an EPA liaison, whose duties include providing information about PESP, EPA policies and procedures — and "providing information to EPA management regarding the needs and concerns of the partner... The liaison will help to ensure that a Partner's... views are considered in connection with the development of pesticide regulatory and agricultural policy decisions." 

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96 Letter to Newt Gingrich from Mark M Hurwitz, President, BOMA, March 1 1995.
97 Julie Rosenberg, personal communication
98 PESP, "Pest Smart Update #3," p. 4
Some technical assistance for adopting IPM is likely to be provided, and EPA may provide funding assistance for adoption of best practices (funding permitting). A format for a recognition program has not yet been settled upon.

History.

While PESP has been officially launched (December, 1994), it is still very much in a formative stage. The process which led to the program began in June of 1993 with a Rosegarden announcement by President Clinton that pledged an initiative to reexamine pesticide policy. The announcement was prompted by the release of a National Science Foundation Study several months previously. The study subjected EPA to significant criticism over how assessments of the risk to infants and children posed by pesticide residues were performed 99.

Following the announcement, which caught at least EPA’s Office of Pesticide Programs largely by surprise, an interagency group involving the FDA, USDA and EPA came together to address the broad goals contained in the announcement 100. Given the lack of a specific charge, the group had difficulties functioning effectively.

Impetus was provided by Congressional testimony related to food safety legislation introduced by the administration. In the course of the testimony, which included EPA Administrator Browner, two specific commitments were made:

- Commodity (crop)-specific pesticide use/risk reduction strategies would be developed, and
- 75 percent of agricultural acreage would be covered by IPM programs by the year 2000.

This impetus — combined with an administration interest in engaging all stakeholders in deliberations on how to achieve policy objectives — led to a February, 1994 workshop, involving about 150 participants carefully balanced among stakeholder groups. Users at the workshop sent a clear message: any meaningful strategy for pesticide risk reduction would have to involve them, and be built from the bottom up, rather than imposed top-down. In addition, a risk-reduction (rather than volume-reduction) approach was confirmed.

Given the opinions voiced at the workshop, the acknowledged difficulty of regulating pesticide use or, for that matter, of obtaining new regulatory authority (see “Regulatory Framework,” below), and general support for partnership approaches within the agency, a voluntary approach was decided upon — the Pesticide Environmental Stewardship Program, to involve three major elements:

- Regulatory changes to streamline the pesticide registration process and allow alternative products, including biologicals, to come to market more quickly
- Partnerships (described above, which would also involve input to regulatory and policy decisions)
- Education, training, outreach, research

Partners began to sign onto the program. The process was a slow one, as there exists considerable distrust of the EPA on the part of the many of the groups who are potential partners. This manifested in a fear that EPA would use the data provided by partners to “build a case” against them or, similarly, that EPA was using the program to create a “hit list” for enforcement actions. Program staff feels that this “trust barrier” has been to some extent overcome; partners are at a greater rate and are contacting PESP, rather than vice-versa.

99 Body mass issues in the dose model were the primary point of criticism
100 Goals included making children safe from risks of pesticides, working with industry to produce safer substances, education and technology transfer for users, emphasizing alternative practices, and the ensuring availability of cost-effective alternatives
Institutional and Regulatory Context.

PESP came out of an interagency process involving the FFDA, USDA and EPA. The Biopesticides and Pollution Prevention division in EPA’s Office of Pesticide Programs administers the program.

The Federal Insecticide, Rodenticide, and Fungicide Act (FIFRA) and the Federal Food, Drug and Cosmetics Act (FFDCA) are the two major pieces of national legislation affecting the area in which PESP operates. FIFRA, which regulates sale, distribution, use — but particularly licensing of pesticides, sets up a relative risk standard. It mandates not an absolute standard of safety, but rather directing that use of a pesticide should result in “no unreasonable adverse effect.”

FFDCA, by contrast, is targeted at qualities of final consumable products; it is the statute which regulates pesticide residue levels in food.

The dynamic between the regulations and PESP is a complex one. While the target of regulation under FIFRA is pesticide manufacturers (who are not partners in the program), a large portion of the effects of regulation fall on pesticide users. Users are the critical group, as the program’s premise is that (see above) voluntary implementation of good practices on the part of users lowers risk and eventually can transform the market. The program must therefore appeal to users; it can do this most strongly by giving them a voice in the regulatory process. This voice is given weight by the obligation EPA incurs toward these organizations who are voluntarily implementing best practices — as a PESP staffer notes, one can’t invite participation in a voluntary program and then blindside that same participant with a rule-making. The existence of the program thus introduces and reinforces consultation with users in the regulatory process.

Measures of Program Achievement.

Since the PESP is still at an early stage of development, no quantitative or qualitative measures of success have been performed. Indeed, no site stewardship plans (the central requirement for partners) have yet been submitted. Program staff is thinking in the long term — “risk is not something which can reduced over a single growing season,” notes one.101 This is particularly true given that a major goal of the program is to bring a safer mix of substances to market, and an average of 12 years elapse between the “drawing board” and registration of a new pesticide. Evaluation of risk is also a problem; a project under the program is to develop quantitative indices for ecological and human health risks. At the bottom line, the program hopes “to be able to demonstrate an impact by the turn of the century.”102

Internally, however, the program seems to have had significant impacts on the Office of Pesticide Programs by injecting users into the regulatory process (see above).

Notes.

PESP is unusual among voluntary programs in that some of the participants and potential participants are unenthusiastic about recognition, or are reluctant to join in the first place precisely because of the recognition it will bring. Food processors fall into this latter group, as anyone manufacturing, for example, baby food, does not want in any way, shape or form, to be associated with pesticides. Participants such as golf courses operators, on the other hand, are enthusiastic about recognition.

101 Martin Lewis, personal communication
102 Martin Lewis, personal communication
WasteWi$e

Goals.
WasteWi$e exists to reduce non-hazardous solid waste entering landfills. To accomplish this goal, the program endeavors to show businesses that reducing solid waste streams is in their own best interest, while providing and supporting a framework within which businesses can commit to take active steps to reduce their Municipal Solid Waste (MSW) contribution.

Program/Participant Interaction: Responsibilities and Benefits of Participation.
Participants are divided into two groups: members and endorsers:

- Members are businesses who have committed some or all of their facilities/segments to WasteWi$e by submitting a membership form signed by a “senior official” within the firm. In signing, members commit to conducting waste reduction activities beyond any they may be currently conducting in three areas: Waste prevention, Recycling collection, and Buying or manufacturing recycled products.

- Waste prevention. The business agrees to identify and implement three “significant,” “practical and cost-effective” waste prevention actions. WasteWi$e suggests actions that would qualify as waste prevention, but the choice is up to the participant.

- Recycling Collection. The business agrees to improve its recycling collection efforts. This may involve starting a program, expanding a current one by increasing kinds of materials collected, or improving the efficiency of a current program through employee education or community outreach.

- Buying or Manufacturing Recycled Products. Non-manufacturing firms commit to increasing the recycled content of their purchases, in any of a number of materials areas. Manufacturing firms may choose this option or choose to increase the recycled content of their own products.

WasteWi$e encourages members to report yearly on implementation progress in three categories:

- Waste prevented (volume or weight)
- Recyclables collected (type of material, weight or volume)
- “Amount spent on products with increased recycled content or the increased amount (in terms of dollars or weight) of postconsumer content in products [manufactured by the firm].”

WasteWi$e’s membership commitment is not a Memorandum of Understanding (MOU); the program made a conscious decision to pursue a less formal membership agreement. As a WasteWi$e staffer noted, a number of companies which are not Green Lights members said that they shied away from Green Lights’ MOU because they were unsure of the full legal implications of an MOU. The registration form (see attached) adopted was designed to make membership easy for companies. Joining is not a legal commitment; however, “members will be asked to withdraw if we see they are not making progress.”

Members receive technical assistance in identifying and implementing their waste reduction activities. This takes the form of literature (e.g., A Business Guide to Recycling Solid Waste), tip sheets, a hotline, and facilitated information-sharing between participants. Some EPA regions offer “solid waste assessments,” involving a site visit, to help companies understand their waste stream. Public recognition is accorded to program members, along with the right to use the WasteWi$e logo.

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103 Recycled content may include post-consumer materials, but not necessarily.
105 Judy Taylor, personal communication
• Endorsers are "trade associations and other membership-based organizations" that (1) commit to conducting a membership drive for WasteWi$e within their own membership within 6 months of joining and (2) agree to continue promoting WasteWi$e after this membership drive while supplying technical information on solid waste reduction. The level of program interaction with endorsers is lower than with members.

History.
WasteWi$e was launched at the beginning of 1994.\textsuperscript{106} Its roots lie in the division's desire to add an implementation element to its information program, building on several publications including *The Business Guide to Reducing Solid Waste*. In tune with the general pro-partnership attitude within the agency and the apparent success of first-generation voluntary programs like 33/50 and Green Lights, it was thought possible to design a program to carry out the "mission" of the division outside its strictly statutory mandate (see "Institutional and Legislative Context," below). Such an approach was necessarily voluntary, and WasteWi$e was structured consciously on the model of Green Lights — though with increased implementation flexibility\textsuperscript{107} (see note about MOUs, above).

The EPA Administrator sent letters of solicitation to the Fortune 1000 companies; it was decided that targeting large businesses made sense, for several reasons:

• Economic arguments in favor of solid waste reduction have most sway with large companies, where both purchasing and disposal costs can be large.

• Solid waste reduction actions by large companies are likely to have a larger impact on total MSW volume than similar actions by small companies; it makes more sense to target large companies first.

A kick-off event was held in May 1994 for companies that had joined as a result of these first mailings.

At present, the program has about 380 participants, of which a little over one-third are Fortune 1000 companies.

Institutional and Regulatory Context.
WasteWi$e is within the Municipal and Industrial Solid Waste Division, which sits within EPA's Office of Solid Waste. Hazardous waste is not within the division's perview.

Under subtitle D of the Resource Conservation and Recovery Act, EPA only has authority to regulate the means of disposal of solid waste (e.g. construction and management of landfills), not its generation. Some states do mandate waste reduction plans, but any EPA effort to reduce MSW streams from the private sector must be strictly voluntary.

Measures of Program Achievement.
The program is in the middle of preparing its first annual report, based on waste reduction figures submitted by members.] Given that members began to sign on only last year, and that the program incorporates a 3-month goal setting period, these numbers will not reflect a full year of activity. Program staff expresses pleasure with many of the reduction figures, highlighting the following as particularly fruitful sources of reduction:

• Transportation packaging

• Office paper reduction, including two-sided copying, reducing memos, policies on the use of email, and electronic billing.

\textsuperscript{106} McGuire et al, p. 16
\textsuperscript{107} Judy Taylor, personal communication
Staff recognizes, however, the difficulty of quantifying waste reduction, a fact which makes rigorous tracking difficult.

Notes.

Like Green Lights, WasteWi$e is promoted as a good business decision that is also good for the environment. Disposal and purchasing costs in many firms can be significantly reduced with proactive solid waste reduction policies, and program literature highlights these savings as incentive to join. Again, this brings up the question of "if these actions save money, aren't companies likely to implement them without a voluntary program?" The WasteWi$e response to this is similar to that of Green Lights:

- Solid waste is not a high priority area and decision-making is fairly low-level. WasteWi$e provides a vehicle for placing the issue before higher levels of management, where innovative decisions can be made.

- The program provides a means for channeling the relevant information and expertise, which is otherwise very atomized, to companies.

**WAVE (Water Alliances for Voluntary Efficiency)**

Goals.

WAVE exists to reduce water consumption by commercial businesses and institutions; currently the focus is entirely on the lodging industry. Reductions are achieved through voluntary commitments on the part of participants to install water-efficient upgrades in their facilities where such upgrades are profitable. Water conservation is desirable both because it (1) conserves a resource (water) which is becoming increasingly scarce in many parts of the country, and which is essential for both human and environmental health, and (2) conserves energy, which is invested both in heating water for use and within delivery systems.

Program/Participant Interaction: Responsibilities and Benefits of Participation.

Participants are divided into **Partners, Supporters and Endorsers**.

- Partners are lodging companies (hotels, motels, inns) — both large chains and smaller establishments. (There are current plans to expand to other commercial businesses, institutional buildings, and multi-family housing.) Partners sign an MOU which commits them to "survey water-using equipment, and, where profitable, install water-efficient upgrades within a pre-arranged time."\(^{108}\)

- Supporters are equipment manufacturers or suppliers, water management companies, utilities or state and local governments that "will help promote the Program and the environmental benefits of water efficiency."\(^{109}\)

- Endorsers are trade associations, professional institutes and organizations and industry boards who agree to promote WAVE and water conservation to their membership.

WAVE provides partners with extensive technical support to assess their water use situation and efficacy of upgrade projects. This includes workshops, a help line and use of multi-media water-use analysis software developed by the program. WAVE provides publicity for program participants, including press releases, public events, and promotional materials for use in the lodging rooms.

\(^{108}\) WAVE, "Introducing WAVE"

\(^{109}\) WAVE, "Introducing WAVE"
History.

At least in part, WAVE's origins lie in the desire of EPA's Office of Water to keep up with the trend toward voluntary programs within the agency. Green Lights was enjoying noticeable success — not just in external publicity, but in terms of the resources it was able to garner internally. It was thought that a voluntary approach might represent a way to garner resources to carry out the goals of the Office, and also enable the office to address goals within its mission but outside its strict statutory mandate.

Many possibilities were considered to meet the very broad directive given by the then-Administrator for Water. A Water Conservation Initiative was settled upon, as:

- The office charged with developing a program had conservation under its purview
- Water conservation was largely unregulated, and therefore a good candidate for a voluntary approach
- A water conservation initiative would have many parallels to the lighting/energy efficiency initiative embodied by green lights; good advantage could be taken of the groundwork already laid by that program.\(^{110}\) (An important difference would be that Green Lights only covers one use of energy — lighting — but a water conservation initiative would have to address a variety of water uses.)

Given the resources initially available, the decision was made to limit the initial target audience to the lodging industry.

This development of concept took more than a year; an individual involved with the process described it as difficult. A large part of the problem, as this individual related it, was that the project was “top-down;” “once the staff understood the assignment, agreement [on a water conservation program targeted at the lodging industry] came fairly rapidly.”\(^{111}\) The process involved companies who later became charter members.

The program began marketing in December 1994; currently, companies are joining at the rate of 2 – 3 a week.

Institutional and Regulatory Context

WAVE is administered by the Municipal Support Division within the Office of Water Management.

Water conservation at the national level is largely unregulated; the National Energy Policy Act contains some manufacturing standards for the water consumption of plumbing fixtures. On the municipal and local level, there has also been relatively little activity. Recently, the Bureau of Reclamation has been interpreting its mandate away from dams and levees towards a resource conservation approach, asking some customers — though not on a national basis — to institute best water practices as a condition for service.

Measures of Program Success.

WAVE plans to track participant actions through reporting forms and compile aggregate conservation figures.

\(^{110}\) Apparently, the original suggestion for a water conservation Green Lights look-alike came from an individual with the NWF who was influential in drafting National Water Conservation Legislation over this time period. — John Flowers, personal communication
John Flowers, personal communication
CHAPTER FIVE: ANALYSIS AND CONCLUSIONS

Practice as validation of theory; evaluation as examination and judgment
This thesis began by establishing that voluntary programs are legitimately considered as public policies for environmental protection and by laying the foundations for the two theoretical inquiries which followed in chapters two and three, which were:

- Where did voluntary programs come from?
- To what ends and with what mechanisms might they function effectively as public policies for environmental protection?

To these theoretical inquiries have been added detailed write-ups of six voluntary programs. As indicated in the introduction to Chapter Four, these case studies should function as a reality check for the ideas and critical structures developed in the theoretical material. Recall that a major purpose of this thesis is to devise useful frameworks for understanding and analyzing voluntary programs. If these theoretically developed frameworks are not validated by the practice of voluntary programs, there are strong grounds to doubt their utility.

Accordingly, this chapter shall analyze the six representative voluntary programs in terms of the frameworks and theories which have been developed, particularly in chapter four. This analysis will accomplish two important tasks:

- Validating the frameworks previously developed for thinking about voluntary programs, and
- Laying the groundwork for a final assessment of voluntary programs as a policy approach.

This latter task — the assessment of voluntary programs as a policy approach — is the one that asks “the larger questions.” The American Heritage Dictionary defines “evaluation” in part as to “To examine and judge carefully” [emphasis added]. Thus far, this thesis has taken the view that voluntary programs exist as policies, and it is therefore important to develop ways to think about them analytically. This is the examine part of evaluation; judgment is still necessary and vital. Therefore, it should be little surprise that there are a set of questions which cannot be avoided, relating to the worth and potential of voluntary programs as a concept. These questions include:

- Are voluntary programs “fluff” or no more than good PR for the firms which participate?
- Do they potentially conflict with the larger mission of regulatory agencies?
- Given that they have limits, what are the dangers posed by potential misapplication?

The final part of this chapter shall attempt to answer these questions.

Validating the inherent constraints argument
For the reasons outlined above, it is important to show that the frameworks developed for analyzing and understanding voluntary programs developed in Chapter Three apply to actual voluntary programs and, more than this, are useful.

Chapter Three began by asserting that voluntary programs operate under three inherent constraints:

- That the goals of the program be to achieve aggregate results, not a level of uniform compliance,
- That the programs exist within legislative niches, and
• That the programs must develop incentives to induce participation and create commitment.

If voluntary programs cannot be shown to operate under these constraints, then a significant portion of the theoretical framework already developed is invalid. The six voluntary programs are therefore characterized according to the first two constraints in turn:

**Aggregate, not uniform results.**
Examine the case write-ups, there is strong evidence that the "aggregate results" constraint is indeed one that applies; recaps of the goals of the six programs are presented below:

<table>
<thead>
<tr>
<th>Program</th>
<th>Program Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lights</td>
<td>reduce atmospheric pollution associated with energy consumed by electric lighting — that is, improve energy-efficiency of commercial lighting infrastructure</td>
</tr>
<tr>
<td>33/50</td>
<td>reduce aggregate national emission of 17 toxics by 50 percent</td>
</tr>
<tr>
<td>Building Air Quality Alliance</td>
<td>improve indoor air quality in public and commercial buildings</td>
</tr>
<tr>
<td>WasteWi$e</td>
<td>reduce volume of non-hazardous solid waste entering landfills</td>
</tr>
<tr>
<td>Pesticide Environmental Stewardship Program</td>
<td>reduce risks associated with pesticide use</td>
</tr>
<tr>
<td>WAVE</td>
<td>reduce overall water use by commercial businesses and institutions to conserve both water and energy</td>
</tr>
</tbody>
</table>

**Figure 5.1: Aggregate nature of goals of voluntary programs**

As can be seen, in no case is attainment of a goal dependent on achieving uniform compliance across an industry or sector. Rather, each goal can be achieved by the participation of some portion of the firms in each target community. If four firms out of 10 contributing to a landfill participate in WasteWi$e, the volume of waste entering the landfill will be reduced; likewise it matters not at all whether it is the Sheraton or the Marriot in a particular town which implements WAVE; water will be conserved in both cases.

Based on this cross-section and the theoretical arguments presented earlier, there is also strong reason to suspect that a voluntary program in development which aims at “specific results” should be suspect.

**Legislative niches.**

Examination of the case studies also suggests strongly the idea of legislative “niches” is a relevant one. While it is obvious (and can be seen below) that no voluntary program may exist in contravention of law, it is not so obvious that understanding the legislative “niche” in which a program exists can be a starting point for understanding incentives and potential difficulties which act in the area of “regulatory agency interaction.”

<table>
<thead>
<tr>
<th>Program</th>
<th>Legislative “niche”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lights</td>
<td>Energy efficiency of lighting is largely unregulated; however the US does have a treaty obligation under the United Nations Framework Convention on Climate Change to reduce emissions of climate change gases to 1990 levels by the year 2000. The US Climate Change Action Plan, which sets out the mechanisms — overwhelmingly voluntary and incentive-based — by which this goal shall be met. Green Lights is a</td>
</tr>
</tbody>
</table>
core program under this action plan, giving it in effect a legal mandate.

As was seen in the write-up, 33/50 exists beside a very complex legislative framework. TRI has probably contributed to a "market effect of public perception" giving firms incentives to reduce emissions now that the extent of such emissions is public knowledge. On the other hand, the program seems to overlap to such an extent with the incentives provided under the "early reduction provisions" of the 1990 Clean Air Act Amendments that, in effect, it is difficult to separate 33/50 objectives and results with those of the law.

Building Air Quality Alliance

EPA possesses only the authority to conduct research and disseminate information with respect to indoor air quality. However, OSHA is currently in the middle of an IAQ rule-making process, stating that the alliance "does not duplicate or impede" its regulatory process. Organizations supporting the alliance have noted that they perceive it as a way to stave off "unnecessary and premature regulation."

Pesticide Environmental Stewardship Program (PESP)

PESP, too, exists within a complex legislative framework. FIFRA dictates the way that pesticides are regulated and constrains to some extent the actions of PESP. However, PESP explicitly sets out to include the viewpoints of users in the regulatory process.

WasteWise

EPA's RCRA subtitle D authority only extends to the means of disposal of solid waste (e.g., construction, management of landfills), not its generation.

WAVE

Although local regulations may exist for water efficiency of new construction, there is no federal regulation for water efficiency in construction or rehabilitation of structures. (The National Energy Policy Act does set some standards for water consumption characteristics of plumbing fixtures, however.)

Figure 5.2: legislative context of voluntary programs

Validating the incentives model and hypotheses about conditions for effectiveness

A significant portion of Chapter Three was devoted to exploring the incentives which voluntary programs have available to them to induce participation and create commitment. Unless these incentives are effective and effectively employed, the voluntary program's ability to change behavior and achieve results will be marginal at best.

A detailed argument produced a laundry list of incentives and examined how they related to each other. Hypotheses were then made about which incentives and contexts for their use were most important. This incentives model and the hypotheses for effectiveness should be validated so far as possible by the case studies. The validation process consists of two steps:

- Confirming that the frameworks developed in Chapter Four for understanding these levers to action can be applied usefully to the case studies
- In light of this analysis, examining the case studies for evidence that the hypotheses about effectiveness have basis in fact.
Applying the incentives model to the case studies.

Under the model developed in chapter four, the incentives available to voluntary programs are dependent on which of three factors are present: profit-undifferentiated situations, profit-positive situations, and enlightened self-interest situations. The questions, then, are as follows:

- Can these situations or component areas of assisted social responsibility be found in the case studies? And,
- If so, do the incentives employed follow the patterns predicted by the model?

The answer to both these questions is “yes;” consider the two samples below:

<table>
<thead>
<tr>
<th>Program</th>
<th>Factors present/incentives seen:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lights</td>
<td>Profit-Positive: program specifies that only “profitable” lighting upgrades be made (Profitable defined as possessing an internal rate of return of at least 20 percent).</td>
</tr>
<tr>
<td></td>
<td>Incentives:</td>
</tr>
<tr>
<td></td>
<td>*cost-savings</td>
</tr>
<tr>
<td></td>
<td>*technical assistance (provides means to do surveys, choose more efficient technologies)</td>
</tr>
<tr>
<td></td>
<td>*links to enlightened self-interest: public recognition by EPA, use of Green Lights logo</td>
</tr>
<tr>
<td>Building Air Quality Alliance</td>
<td>Extended Profit Accounting: benefits of program generally fall under a “broad view” of profit-maximization: increased marketability of rental space, possible liability protection, political goodwill with tenants.</td>
</tr>
<tr>
<td></td>
<td>Incentives:</td>
</tr>
<tr>
<td></td>
<td>*avenues for third-party public recognition, reinforcing benefits noted above.</td>
</tr>
<tr>
<td></td>
<td>*reducing uncertainty and ambiguity (8-point checklist, definition of what constitutes “best practices”)</td>
</tr>
</tbody>
</table>

Figure 5.3: Applying the incentives model to actual programs

Examining hypotheses about context and effectiveness

The experience embodied by the case studies seems to confirm the importance of a public agency role in setting out clear guidelines for what constitutes “responsible action.” This was particularly evident in the experience of the Building Air Quality Alliance, where participants in the planning meetings made it clear that any effective program would have to be promulgated by the agency. This is not the same as saying that definitions of “responsible action” should be formulated entirely at the top; planning meeting participants made it clear to PESP that consultation was critical to achieve buy-in. In programs like these, which work for behavioral changes without near-term bottom-line benefits, this balancing between consultation and placing the authority of the agency behind standards and guidelines so developed may be very important.

It is interesting to note that those programs which can most easily quantify their results and engage in rigorous data collection have received the most public acclaim. Green Lights and 33/50 are the two relevant examples. Programs whose results may only appear in the much longer term — such as PESP and the Building Air Quality Alliance — may find it more difficult to garner institutional resources or demonstrate their efficacy. In times of fiscal austerity, their may be institutional difficulties in store for programs which cannot easily quantify results.
Making judgments

It has now been shown that the theoretical structures developed for understanding voluntary programs and the hypotheses about effectiveness which arise out of these structures have significant utility in analyzing real voluntary programs. Now the text turns to the final discussion of this thesis, that of judgments and final assessments.

What sort of alternatives are voluntary programs?

Chapter Two presented a scheme for understanding alternative environmental policy approaches, based on differences among goals and structures/mechanisms for eliciting responsible environmental action.

As the preceding discussions and the case study write-ups have made clear, voluntary programs are not a “pure” or simple policy approach. They function largely in the “incentives/liabilities” side of “structures and mechanisms. But (except for perhaps programs operating in profit-positive situations) they depend strongly on the rule-based infrastructure of command and control. In some cases, they are using long-term goals aimed at creating culture or value shifts within markets or groups (e.g., PESP). They aim at numerous definition types of “responsible action,” including aiming for baseline numerical results (33/50), practicable results (WAVE and Green Lights’ criterion of profitability), and effecting market changes by changing demand patterns. Thus, generic characterization, particularly with respect to goals (definitions of responsible action) is misleading; each voluntary deserves individual scrutiny.

Are voluntary programs “fluff?”

Historically, many environmental regulations have been implemented with many cries of alarm and much gnashing of teeth from industry. In the terminology developed in this work, this has been because the differences between current practice and the standard of responsible behavior embodied in the regulation were large.

Voluntary programs are different. They lack the ability to command sweeping changes in behavior. Given that this is the case, a reasonable question is “how significant are their environmental goals be?” or “how much more responsible can they make firms?” Or, in short, “are they fluff?”

That voluntary programs can achieve positive environmental results is not in question. This is most measurable in programs like Green Light, WasteWi$$e, and WAVE, where kilowatt-hours conserved, tons CO2 avoided, tons MSW avoided, etc., can all be quantified with some accuracy. Further, many of these improvements have come in areas — clearly within the moral scope of the agency’s larger mission to protect the environment — where there exists little authority to regulate. And given the current political climate, it can certainly be argued that new regulatory authority is unlikely to be forthcoming.

The opposition encountered by the Building Air Quality Alliance is evidence that voluntary programs can be taken seriously as environmental policies by the community of their potential participants. The potential for voluntary programs to create a standard of practice which has power because it constitutes a legally relevant definition of responsible behavior can be significant.

Additionally, their power to command should not be underestimated. There is the anecdotal evidence, cited in the previous chapter, in which corporations wanted to know “which of these voluntary programs are mandatory?” And in PESP, for example, there are participants who are reluctant to be recognized, but participate nonetheless, either for the access to the agency the program provides or because they recognize the legal importance of adhering to best practices. This erodes the image of the voluntary program as a nothing but a government-sponsored PR opportunity.
Do voluntary programs create more altruistic firms?
Voluntary programs are sometimes described as ways of providing opportunities for firms to be better, more socially responsible actors — in the terminology of Chapter One, to act more in an ASSR mode. Under the frameworks developed by this thesis, this description is largely inaccurate. Voluntary programs act to change the calculus of costs and benefits which firms engage in; “assisted social responsibility” is a realm of economic, not moral, decision-making. This is not to say that voluntary programs may not be positive forces working to reduce the burden of adversarial legalism in environmental protection (see Chapter Two). They may well fulfill precisely such a role. But they do not seem to be forces of “deep reform” within the corporation, as outlined in Chapter Two’s Agent-of-Society Social Responsibility discussion.

Questions voluntary programs raise for the agency
Granted that voluntary programs are not — or not always — “fluff,” they still raise some important ethical and philosophical questions for a regulatory agency which engages in them. There may not be correct answers to these questions, but they should be at least considered as part of the process of starting up a voluntary program. However, the agency “has no consistent policy with respect to conditions for starting up voluntary programs.”

Consultant an appropriate role for regulatory agency?
Many place government in the role of consultant relying on provision of information to elicit responsible behavior. (That is, technical assistance is a lever to action in profit-positive and profit-undifferentiated situations.) The expertise required to be a good consultant and the expertise required to regulate are quite different. Voluntary activity can require much more micro-level involvement in the plant than regulatory activity. The question, then is: “Should a regulatory agency be concentrating on developing consultant expertise?” In some cases, such as Green Lights, commitment of institutional resources to developing this expertise is significant. Given that agency resources as a whole are very tight, and show every sign of becoming more so, the question is a relevant one. (The counterargument in favor of expending resources in this way is that voluntary programs permit a greater leverage effect per dollar of outlay than do regulatory/enforcement approaches.)

Targeting large, resource-rich firms?
Voluntary programs may also raise issues of equity. As seen in the write-ups, many are targeted to the larger firms — both by design and because larger firms may have the personnel base to name a coordinator or the capital base to invest in improvements with multi-year payback periods. To the extent that these programs represent a “flow of benefits” from the regulatory agency, these benefits may be skewed towards larger, more stable and resource-rich firms. Especially where these programs operate in profit-positive situations, this may amount to a subsidy of larger firms, as the government spends money to help these firms save money.

Firewalls between enforcement and voluntary activity
Voluntary programs can raise another question: that of “building firewalls” between voluntary and enforcement offices. Participation in voluntary programs does not remove the obligation to

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112 The author is grateful to Michael Mason of the EPA for discussions which helped tremendously in the development of this section. The views expressed herein should be assigned only to the author, however.
113 Michael Mason, personal communication.
114 It should be noted that almost no one — free market capitalists to the strongest adherents of the “gorilla in the closet” have a problem with provision of information per se as a policy tool. On the free market, Milton Friedman extreme (“the social responsibility of business is to increase its profits,” see Chapter One), access to information is a condition for the effective functioning of markets. On the strict regulatory side, information increases the ability of firms to comply. The issue here is rather the ability of the EPA to function as consultant.
comply with the law, and in many cases EPA has little statutory discretion in the application of penalties, once violations are known.\footnote{This is problematic; as discussed, an important lever/incentive for voluntary programs is the perception that they can help a firm accrue good will within the agency. If the agency takes effective steps to isolate voluntary programs from enforcement, this lever could be removed. Further, violations may become known precisely because the firm is cooperating with the agency on a voluntary program — what are voluntary programs to do with such knowledge?} Admittedly, for programs operating within “profit-positive” situations, where there are bottom line inducements and little regulatory infrastructure, difficulties with this separation between voluntary and enforcement activities may be few. But in a program like PESP, where access to the agency and the regulatory process is a major lever for participation, a clear separation between enforcement and voluntary activity is troublesome. As noted in the PESP write-up, there is an “obligation EPA incurs toward these organizations who are voluntarily [participating in a best practices program] — as a PESP staffer notes, one can’t invite participation in a voluntary program and then blindside that same participant with a rule-making.”

\textbf{Proper ends, limits and potential for misapplication}

\textit{Voluntary Programs should not be institutional impediments to regulation}

Many members of the environmental advocacy community and voluntary program staff members are in agreement that voluntary programs are useful when there exists insufficient information to regulate.\footnote{That is, they can be a means of promoting best practices where setting strict numerical standards would make little sense. Where, however, sufficient information does exist to establish a significant health risk and set a health-based standard, voluntary programs would seem an inadequate policy approach.} For example, a voluntary program might be initiated to establish best practices given little firm scientific knowledge. If knowledge changes, however, the voluntary program should not be an institutional impediment to regulation. It is disturbing that some, at least, seem to see voluntary programs in precisely that role — recall the Building Air Quality Alliance write-up, in which the building owners and manufacturers organization was cited as saying “it [the Alliance] will greatly assist us in staving off unnecessary and premature regulation.”

\textbf{Conclusions}

\textbf{Frameworks for analysis validated}

Voluntary programs are public policies for environmental protection and can and should be evaluated on that basis. Any process of evaluation consists of two parts; examination and judgment. This thesis has developed a number of frameworks for the evaluation of voluntary programs out of basic definitions of public policy and an understanding of the nature of corporate social responsibility. These frameworks have been shown to be useful for analysis and understanding through their application to case studies. This capability for analysis and understanding make possible some final assessments, which have constituted the second half of this chapter:

\footnote{Where the agency does have discretion, the principle of accumulating “good will” may be perfectly legitimate — but the agency has in the past often been reluctant to exercise such discretion due to the political problems which apparently “uneven enforcement” can produce.}

\footnote{For example Personal communication, Julie Rosenberg, Jim Gomes, and Paul Burns}
Judgments about efficacy

Voluntary programs are by no means necessarily “fluff” or no more than good PR opportunities. They can achieve very real environmental benefits. They are (or should be) restricted in use to problems where aggregate, rather than specific results are acceptable. Their ability to induce participation and create commitment in large part depends on the strength of public interest and the strength of the regulatory agency; they are in this sense dependent on the existence of command-and-control, public environmental sentiment, and effective employment of right-to-know laws for their own success. This dependence on the body of command and control is problematic for the regulatory agency because there are often strong considerations which favor hard divisions between voluntary and enforcement activities. Such division removes at least part of the incentive to participate in regulatory programs. In addition, voluntary programs raise questions of equity and the role of a regulatory agency which are not now being considered in a systemic way.

In spite of these problems, however, voluntary programs are an effective means of achieving certain environmental goals. Particularly given that the current political climate would seem to limit new regulatory authority, voluntary programs, intelligently applied, may fulfill an important environmental protection role.
APPENDICES

Appendix One: ASSR Models for Corporations

There is considerable speculation and little consensus as to what form a new decision framework — or a new set of internal rules — producing socially responsible corporate behavior might take or how such a framework might evolve. Two models are sketched below for illustrative purposes:

"Humanomics"

Humanomics is Lewis Solomon’s framework for a “reconceptualization of the modern business corporation.” It is founded on two principles:

- **Human Needs Approach.** A corporation practicing humanomics redirects itself from the “economist’s goal [of] profit maximization to include concern for human beings . . . develop[ing] . . . economic and political organizations that, in turn, further human growth and development as part of a larger interest in the quality of life . . .”117

- **Ecological Orientation.** A humanomic corporation would pursue business decisions explicitly considering current and future ecological conditions, engaging in sustainable activities.

Corporations adhering to these principles would, he says, be decentralized, with a large degree of employee participation in the decision-making process. This is so because Solomon holds that achieving responsible corporate actions is a matter of fundamentally reshaping the political economy of the firm: “why should people perform dull, meaningless work in inhumane business organizations, and why should workers take orders from leaders they do not choose? . . . a need exists to examine how power is and should be distributed in the modern corporation and who should participate, formally and informally, in the decision-making process.”118 (Solomon develops and illustrates this and other aspects of his humanomics concept through two case studies: Ben & Jerry’s Homemade, Inc., and The Body Shop International PLC.)

**Personal Responsibility Model**

Christopher Stone advocates application of the model of individual responsibility to corporations to create necessary “revised definitions of virtue and redirected vectors of loyalty”119 in corporate action:

“It has always seemed to me that the best way to supply some hard content to the notion of corporate responsibility is to go back and examine the issue of what ‘being responsible’ entails when our subject is not corporations, but ordinary flesh and blood mortals.” Stone identifies two components of individual responsibility: (1) abiding by the law, and (2) evaluating potential courses of action in moral terms and then acting on such moral reflection.

A corporation acting under such a definition of responsibility and one acting in a profit-maximizing ACSR way might quite often perform identically, Stone notes: after all, “what we want from companies, by and large, is the sort of behavior, the supplying of good quality at a low price, that profit-orientation assures as well as any known technique.”120 Yet, situations do exist in which the actions of the firms would differ, no matter how liberally profit-maximizing is defined, and no matter “how liberally the firm allows for the possibility of recapturing the benefits of its ‘nice’ conduct through corporate good will,” — “a class of

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117 Solomon, p. 1629
118 Solomon, p. 1628
119 Stone, p. 575
120 Stone, p. 574
situations will remain in which a [responsible] course of action . . . will conflict squarely and irreducibly with profits.\textsuperscript{121}

The question for Stone then becomes one of how, in this class of situations, to create a sense of responsibility in the firm analogous to responsibility in individuals. He considers, and largely rejects, strategies of legal interventionism which impose particular internal structures on firms designed to ensure “responsible” corporate action. This rejection is made on several grounds: the specificity of regulation required is (1) impossible to achieve in an exhaustive sense, (2) enforcement and monitoring carry large expenditures and social costs such as “atrophying the moral timbre of the individual citizen”, (3) internal mandates to firms often “overdeter” and inhibit innovation, and (4) laws create a “bright line standard,” which, if considered as the sole limit to behavior, may result in much harm in new situations or those unforeseen by the law’s writers. Maitland sums up this perspective aptly when he writes: “there are limits to the extent to which socially responsible behavior can be ordered by law. Beyond a certain point, the costs of expanding the apparatus of state control become prohibitive — in terms of abridged liberties, bureaucratic hypertrophy, and sheer inefficiency.”\textsuperscript{122}

What is left after legal interventionism — an option only for firms proven recidivist — is nourishing a “sense of responsibility” to create change in corporate culture. Changes of this sort, notes Stone “cannot be imposed — not successfully at any rate. They have to evolve, with some push from people who care.”\textsuperscript{123}

\textbf{Appendix Two: DeWitt John’s “common themes” in proposals for environmental policy reform}

John notes that the dozens or hundreds of prescriptions for correcting the course of environmental policy, diverse as they are, fall into three broad categories.\textsuperscript{124}

- **Strengthening the environmental “voice”**/giving greater weight to environmental values in the policy process. Proposals in this category see a greater assertion of environmental values in public life (within the regulatory and policy-making process, in education, in community activism) as the “fix” for environmental policy. Examples of these proposals include:

  increasing regulatory “hammers,” institutional strengthening of EPA as a regulatory agency, alignment of environmental advocacy groups with community based groups (environmental justice), adopting political values in line with “deep ecology.”\textsuperscript{125}

- **Achieving a better balancing of environmental and economic values.** Prescriptions falling into this category find the fault with current approaches to environmental policy to be rooted in how current approaches balance environmental and economic values. This balance may be flawed in such areas as the distribution of costs of regulation, the inefficiencies imposed by “adversarial legalism,” or in failing to allocate environmental protection resources in a leveraged way. Examples of proposals which focus on correcting this balance include:

\begin{itemize}
  \item 
\end{itemize}

\textsuperscript{121} Stone, p. 570
\textsuperscript{122} Maitland, p. 132
\textsuperscript{123} Stone, p. 575
\textsuperscript{124} This model is developed over pp. 29 – 45 of John’s Civic Environmentalism.
\textsuperscript{125} Deep ecology is a loosely defined concept which holds that environmental values are more important than economic ones and that human society should exist subservient to, rather than superior to, ecosystems and the environment. An implication of deep ecology is a radical decentralization of economic activity, leading to local self-sufficiency. (John, p. 31)
Use of market mechanisms (emissions fees, tradable permits, etc.), changing focus to pollution prevention, homogenizing regulation and reporting requirements, rationalizing environmental priorities

- **Moving toward sustainability.** Sustainability is a loosely defined ethic which holds that economic activity should be conducted in such a way that the ability of future generations to sustain themselves is not diminished. Sustainability searches for environmentally sound development paths; indeed, it holds that environmental health can only be assured in a climate of prosperity. Sustainability represents a value shift which integrates environmental values into economic decisions “up front,” and changes the rules by which these decisions are made. Examples of “sustainability”-oriented prescriptions include:

  Discarding discounting as a way to evaluate decisions which have long-term environmental or natural resource consequences, adopting broad policies which insure against long-term environmental “risk” now rather than an incremental policy approach which responds to environmental deterioration as it becomes apparent.

  These categories of reform proposals contain in common the four reform themes discussed in Chapter Two.
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