

---

## **STIMULATING VOLUNTARY COMPLIANCE: NEW POLICY DIRECTIONS IN THE UNITED STATES: THE MINNESOTA EXPERIENCE**

PADDOCK, LEROY C.

Director of Environmental Policy, Minnesota Attorney General's Office, 445 Minnesota Street, Suite 900, St. Paul, Minnesota 55101, USA

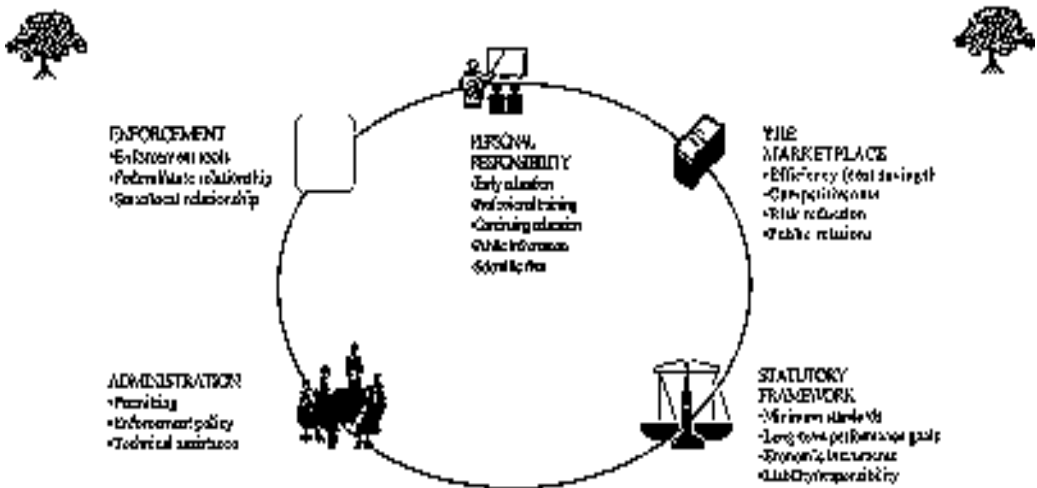
### **SUMMARY**

The principle goal of environmental enforcement programs is to contribute to improved environmental quality. To most effectively advance this goal enforcement officials must actively participate in efforts to stimulate voluntary compliance. In addition to significantly contributing to environmental improvement, successful voluntary compliance programs allow governments' always limited enforcement resources to be focused on poorer performing organizations, build support for enforcement efforts, and can help embed environmental concerns in organizations making it less likely that the organizations will violate environmental laws. This article discusses some of the new policy directions being pursued in the United States with particular emphasis on programs being developed in the State of Minnesota that are designed to stimulate voluntary compliance.

### **1 BACKGROUND**

Environmental improvement is driven by several different mechanisms including personal values, economic incentives, statutory requirements, the way laws are administered and enforcement. Figure 1, below, is a graphic illustration of these drivers. It also lists several types of programs or issues that are important aspects of each driver. Over the last two decades, most of governments' efforts have concentrated on statutory and administrative requirements coupled with enforcement programs to drive environmental improvement. These drivers have most often been used to impose change on sometimes unwilling or at least reluctant regulated entities. In the absence of a widely held environmental ethic or clearly perceived economic motivations for environmental improvement, these imposed requirements were the most effect way to assure that environmental improvement would occur. There is a consensus in the United States that the statutory requirements introduced over the last 25 years together with the efforts of the federal and state governments to enforce these requirements have resulted in significant improvement in environmental quality.

The increasing attention to environmental issues in the United States, sparked by environmental crises, pervasive regulation, prominent enforcement actions and more widespread environmental education, has triggered a growing environmental ethic in the country. These same factors have made it clear to businesses that their economic health may be heavily impacted by

**Figure 1. Drivers of Environmental Improvement**

environmental issues. The result is that new types of programs grounded in personal values and economic self-interest, including voluntary compliance programs, can successfully be employed to achieve important environmental objectives. The experience with recycling programs in the United States which relies on voluntary compliance has demonstrated that a change in personal values can produce dramatic results. In addition, factors such as the increasing cost of achieving marginal environmental improvement, the growing focus on diffuse sources of pollution such as air toxics and non-point water pollution, the rapid expansion of the number and type of regulated facilities, and the limited resources available to government to develop and enforce environmental regulations, suggest the need for greater emphasis on voluntary compliance programs.

Because of these changes, the federal and state governments are redesigning their existing statutory, administrative and enforcement programs to make them more flexible and to build in performance incentives. In addition, these governments are turning to new ways to drive environmental improvement. Many of these new voluntary compliance techniques involve fostering personal responsibility for environmental problems or helping to realign economic incentives in ways that promote environmental improvement. Because they rely on the basic behavioral motivators of values and economic self-interest, these new programs may be more effective in embedding environmental issues in personal and workplace decision making.

Since these new approaches could have significant effects on enforcement programs, it is critical that enforcement officials understand and participate in the development of the new techniques. Perhaps the most significant impact of the efforts to encourage voluntary compliance programs is the ability to focus always limited enforcement resources on poorer performing organizations. With often tens of thousands of facilities subject to environmental requirements specific and general deterrence through enforcement cannot, by itself, assure wide spread

compliance. Voluntary compliance programs that preserve scarce enforcement resources, so that those resources can be targeted on the most significant environmental problems and on the worst offenders, will be most successful.

A second important benefit for enforcement officials derived from voluntary compliance programs is greater support for enforcement programs. Enforcement programs that are part of a comprehensive compliance strategy that includes compliance education, technical assistance and other voluntary compliance options are likely to be perceived as fairer than those programs that place little emphasis on voluntary programs. In addition, it is much more difficult for enforcement targets to argue to political leaders and to courts that they have treated unfairly if voluntary compliance programs were available to the organizations. Finally, as voluntary compliance increases in a sector, the businesses in that sector are more likely to support enforcement efforts against laggards because the laggards may be gaining at least a short term economic advantage over the sector leaders by avoiding costs associated with compliance.

When voluntary compliance efforts cause environmental concerns to become embedded in personal decision-making, a third benefit for enforcement officials results. Since imposed changes often result in reluctant compliance, people subject to imposed requirements will frequently look for ways to get around the imposed requirement. On the other hand, people are much more likely to enthusiastically pursue change that is consistent with their personal ethic or with their economic self-interest. Governments will have to continue to establish norms to ensure at least a basic level of protection for the environment and for public health, as well as to deal with people who will not respond to voluntary programs. Still, by focusing some voluntary compliance efforts on altering personal values or enhancing economic motivations for environmental improvement a sociological setting is created where the need for enforcement of some requirements is likely to be significantly lessened and where continuous improvement of environmental outcomes may occur.

The remainder of this article discusses several voluntary compliance programs in the United States focusing particularly on the efforts of the State of Minnesota. In the United States, responsibility for environmental programs is divided between the federal and state governments. Typically, the United States Congress adopts legislation that gives the U.S. Environmental Protection Agency (U.S. EPA) primary responsibility for setting standards to protect the country's air, water and land from pollution. In most cases, Congress authorizes U.S. EPA to delegate to the states the ability to issue permits under the federal laws and to enforce the laws if a state has adequate statutory authority and the resources to administer the program. Although U.S. EPA retains authority to review state programs and to independently initiate enforcement actions, the majority of enforcement in the United States is conducted at the state and local governmental level. In addition to authority delegated from U.S. EPA, states enact their own environmental programs to suit the particular needs of the state. Minnesota has long been a leader among the states in developing innovative environmental programs.

Within Minnesota, the responsibility for environmental programs is shared by the Minnesota Pollution Control Agency (part of the Governor's office) and the Minnesota Attorney General's Office. The Attorney General is an independently elected public official in Minnesota. The Pollution Control Agency is responsible for developing environmental regulations, issuing permits, investigating violations of environmental requirements and initiating administrative enforcement actions. The Attorney General is responsible for investigating criminal violations of environmental laws, representing the Pollution Control Agency in administrative hearings and initiating civil judicial enforcement actions. The Attorney General's Office has for several years worked closely with the Pollution Control Agency to develop more effective enforcement tools and to develop preventative programs that are designed to minimize the need for enforcement.

While some Attorneys General in the United States do environmental policy development work, environmental policy development has been a priority for Minnesota Attorney General Hubert H. Humphrey for nearly a decade. This priority is demonstrated by the fact that Minnesota is the only state that has had a full time Director of Environmental Policy in the Attorney General's Office over the past eight years.

## **2 VOLUNTARY COMPLIANCE PROGRAMS**

### **2.1 Personal responsibility**

Personal values and information are critical drivers of behavior. Recognizing this fact, the Minnesota Attorney General's Office has long focused on educational efforts to shape personal values in order to better address such intractable enforcement problems as drug abuse and sexual violence. Similarly, initiatives to improve environmental education and to increase access to environmental information can enhance personal responsibility for environmental improvement.

#### **2.1.1 Environmental management training**

Most people responsible for environmental compliance in the United States have had little training related to developing and implementing comprehensive environmental management systems. The Dutch government relies heavily upon environmental management systems (referred to as "internal care systems") to achieve their goals for sustainable development. They have identified several elements that should be part of a quality environmental management system. These include:

- A company environmental policy statement.
- A detailed environmental management program.
- Integration of environmental management in normal business operations.
- Internal monitoring of environmental activities and releases.
- Internal information and training.
- Internal and external environmental reporting.
- Periodic environmental auditing.

These elements are similar to the International Standards Organization draft Environmental Management Systems Standard (ISO 14001).

Based on a belief that comprehensive environmental management systems could significantly increase compliance, the Minnesota Attorney General's Office, in conjunction with three non-profit training organizations, will be conducting two environmental management training programs over the next two years. One program will focus on larger businesses, while the other will use different techniques to reach small and medium-sized businesses. The programs are funded by a \$197,000 grant from the U.S. Environmental Protection Agency, program fees and in-kind donations of time from the Attorney General's Office and an environmental consulting firm.

#### **2.1.2 Eco-Sense curricula**

Early educational opportunities can have a major impact on the development of environmental values. These values, in turn, are likely to affect voluntary compliance as young people grow to assume decision-making positions. The "Eco-Sense" series of educational

curricula was developed by the Minnesota Attorney General's Office in conjunction with a non-profit education organization to help students integrate environmental and economics issues into their day-to-day decision-making. Three curriculum guides have been developed to date:

- "Eco-Sense" designed for 12 to 17 year-old students.
- "Eco-Sense: It's Elementary" designed for 7 to 11 year-old students.
- "Eco-Sense: Know Tomorrow," a curriculum focused on sustainable development designed for 14 to 17 year-old students.

Several hundred teachers in Minnesota have been training to use the curriculum. The program costs about \$40,000 per year to operate. The money is raised through foundation grants and corporate donations made to the non-profit educational organization.

Focusing on values, information and personal responsibility to increase voluntary compliance with environmental regulation will not always result in behavioral change in the short term. However, embedding environmental values in personal decision-making may be the most effective way of minimizing environmental enforcement problems over the long run.

## 2.2 Economic incentives

Economic self-interest is also a powerful motivator for change. In the past, many people assumed that economic interests and environmental interests were polar opposites.<sup>1</sup> However, recent experience demonstrates that economic and environmental interests are increasingly compatible. For example, one study on reduction of pollution through changes in production processes found the annual savings per dollar spent on reduction of polluting chemicals in industrial processes averaged \$3.49 for the 27 activities studied.<sup>2</sup> Research also indicates that companies that take steps to minimize resource input and pollution output are likely to be more competitive.<sup>3</sup>

### 2.2.1 Economic incentives for adopting comprehensive environmental management systems

Organizations may achieve economic benefits by adopting comprehensive environmental management systems; these benefits result from risk reduction achieved by better management techniques. The risks that may be mitigated through improved management systems include:

- Government enforcement and noncompliance penalties.
- Tort liability.
- Workers compensation claims.
- Superfund and other cleanup liability.
- Adverse publicity from spills or other environmental problems.

Although the risk reductions and competitive advantages associated with comprehensive environmental management systems should provide businesses with strong internal incentives to adopt these practices, there are a number of factors including short-term costs, lack of training and organizational culture that have kept many companies from moving in this direction. To overcome these roadblocks, the Minnesota Attorney General's Office is exploring whether external incentives may create the momentum that would lead to widespread adoption

of these systems. One of these external incentives is a penalty mitigation program such as the one discussed in section 2.5. Another external incentive may be increased access to capital and insurance

Lenders, insurers, and financiers can play an important role in encouraging companies to adopt environmental management systems, thereby reducing risks relevant to their lending, insurance and financing decisions. Specific recognition of these lowered risks in the form of expanded availability of loans or insurance, lower rates for loans or insurance, or increased investment would certainly be a powerful incentive for companies to institute these systems and practices. For this to happen, there must be clear criteria for identifying what constitutes a quality environmental management system. The ISO 14001 standards could conceivably serve this purpose. There also must be a clear understanding that these systems can substantially lower risk and increase competitiveness. Along the same lines, businesses will have to know the kinds of practices that will qualify them for better access to loans and insurance, and increase their attractiveness to the financial community.

Government can play a key role in facilitating the criteria development process. Because better access to capital and insurance could be a powerful incentive to adopt and implement environmental management systems, the Minnesota Attorney General's Office is now working with NGO, business, insurance, banking and investment community representatives to identify specific steps that could be taken to develop new financial incentives for implementing comprehensive environmental management systems.

### 2.3 Statutory framework

The structure of environmental requirements can be a major factor influencing the effectiveness of voluntary compliance efforts. Although environmental conditions have improved dramatically in the United States under the current statutory framework we have learned that this framework can also create barriers to further environmental improvement.<sup>4</sup> Two key barriers to voluntary compliance are technology-based standards and a lack of stable long-term environmental goals. Although technology-based standards may be needed in some cases, these standards frequently stifle innovation and lead to higher compliance costs.<sup>5</sup> The lack of stable long-term environmental goals create uncertainty which is difficult for many businesses to deal with in their normal planning process, thus creating additional resistance to meeting environmental requirements. Regulatory reform efforts that encourage innovation, set out clearer long-term environmental goals and provide reasonable planning horizons for affected organizations are more likely to stimulate voluntary compliance than some of the current approaches.

#### 2.3.1 President's council on sustainable development

In 1994 President Bill Clinton established a multi-stakeholder council to recommend ways for the United States to move toward a more environmentally-sustainable economy. The President's Council on Sustainable Development conducted most of its work in multi-stakeholder task forces. The Minnesota Attorney General's Office participated in the Eco-Efficiency Task Force of the President's Council on Sustainable Development. This task force developed recommendations for reform of the regulatory process which are designed to encourage innovation and progress toward sustainable development. These recommendations include:

- Ambitious long-term environmental performance goals, strategically and collaboratively set, on an industry, facility, agency, community or geographic basis.

- 
- Interim quantitative milestones which ensure that participating entities continuously improve environmental performance and make progress toward long-term performance goals.
  - Increased operational flexibility that maximizes innovation and cost-effectiveness in exchange for achieving improved environmental performance.
  - Use of incentives to increase operational flexibility, decrease participation costs and encourage continuous improvement in environmental performance.
  - Use of information mechanisms to measure and demonstrate that progress toward goals is occurring and to provide participants with information that facilitates environmental decision-making while sufficiently protecting proprietary information.
  - Enhanced public involvement in setting goals for sustainability and reviewing progress toward goals at the local, regional, state and national levels.
  - A life-cycle perspective that encourages participating entities to establish pollution prevention and product stewardship as standard business practices.
  - A multi-media approach that encourages participating entities to manage environmental responsibilities in a “whole-facility” or “whole-ecosystem” fashion.

The federal and state governments are now examining what they can do to create more efficient and effective regulatory systems based on many of the ideas identified above.

## 2.4 Administering environmental laws

The manner in which environmental laws are administered can also stimulate voluntary compliance (and beyond compliance) efforts. Because flexibility in changing production processes is very valuable to many companies, they are often willing to commit to voluntary reductions not required by law in return for more flexibility in the permitting process. Providing technical assistance to organizations to help them make desired changes can also help spur voluntary compliance. By providing incentives and assistance to organizations that take significant steps to improve their environmental performance, a better working relationship develops between the regulated organization and government. This more “trusting” relationship is likely to further encourage voluntary compliance.

### 2.4.1 Project XL

One of the priorities of the Clinton Administration is increasing the efficiency and effectiveness of the federal administrative agencies. Vice President Al Gore was appointed to lead this effort which was called the “National Performance Review.” As part of the National Performance Review, the Clinton Administration issued a report in early 1995 entitled “Reinventing Environmental Regulations.” One of the key recommendations in the report was the creation of alternative performance-based strategies. “Project XL” is a critical component of the reinvention effort. In partnership with the states, the U.S. EPA is providing a limited number of responsible companies the opportunity to demonstrate excellence and leadership. They will be given the flexibility to replace the requirements of the current system at specific facilities with an alternative strategy developed by the company if certain conditions are met:

- The alternative strategy must produce environmental performance superior to that which would be achieved by full compliance with current laws and regulations.
- The alternative strategies must be “transparent” so that citizens can examine assumptions and track progress toward meeting promised results.

- The alternative strategy must not create worker safety or Environmental justice problems.
- The alternative strategy must enjoy the support of the community surrounding the facility.
- The alternative strategy must be enforceable.

Minnesota is the only state authorized by the U.S. Environmental Protection Agency to undertake Project XL pilot projects. XL documents will take the place of individual permits that participating facilities might otherwise hold. As part of its XL program, the Minnesota Pollution Control Agency developed the “Environmental Regulatory Innovations Act”<sup>6</sup> which is currently pending before the Minnesota legislature. The Act will provide a statutory base for the administrative changes that are part of Project XL.

Under the Act, the Minnesota Pollution Control Agency could issue an XL permit if:

The permit will facilitate pollution prevention and source reduction activities by the facility and result in significantly more overall pollution reduction from the facility, its customers, or suppliers than would otherwise be required by applicable laws, without increasing any negative impact on the environment, the local community, or worker health and safety.

- the pollution prevention, source reduction, or other pollution reduction goals are verifiable.
- The pollution limits contained in the permit are verifiable and enforceable.
- The stakeholders have been involved through a decision-making process that seeks consensus in the design of the permit and will have the opportunity for continued involvement in the implementation and evaluation of it.
- The permittee agrees to make available information that it gives the agency about the XL project, except confidential information to the stakeholder group in a format that is easily understood.
- The permittee agrees to provide an assessment of the success of the project in reducing the time and money spent at the facility on paperwork and other administrative tasks that do not directly benefit the environment.
- The permittee, the pollution control agency, and other state and local agencies are likely to expend less time and resources over the long term to administer the Minnesota XL permit than other types of permits.
- The project is consistent with the federal government's Project XL guidance and any federal legislation governing the Project XL program.

Minnesota's XL program is based on a project that the Minnesota Pollution Control Agency (MPCA) and 3M Corporation undertook in 1992 and 1993 which resulted in an innovative air quality permit. The permit provided precedent setting operational flexibility by preauthorizing facility modifications as long as air emissions remain below a cap set at 50 percent less than was actually emitted in 1991. Not only has significant environmental benefit resulted from this permit, but 3M and the Agency's costs have been reduced. Between March 1993 and January 1995, the 3M Corporation made 21 changes that would have required permit modifications. Avoiding the permit modification process resulted in two important benefits for the company. The company saved 1,530 hours that would have been spent on permit applications and other administrative time, and it was able to get its products to market more quickly. The Agency also saved an estimated 700 hours of staff time that would have been expended in preparing and processing seven major permit modifications.

## 2.4.2 Technical assistance

Changes in products or processes can make compliance with environmental requirements much easier by preventing pollution problems from arising. Governments in the United States have been a catalyst for pollution prevention activities for over a decade through technical assistance programs. In addition, providing concise information about environmental requirements and how to meet those requirements can increase compliance rates.

Recently, U.S. EPA has established several small business compliance assistance centers to focus on businesses such as printing, metal-finishing and auto service stations where compliance costs are high and noncompliance rates are significant. These new centers will:

- Assist state and local agencies and trade associations to develop “plain English” guides to regulations.
- Identify low-cost strategies to achieve compliance.
- Develop ways to consolidate reporting and cut paperwork for client industries.

The long term plan is to establish one national compliance center for each small business sector, which would work with the trade association and state programs providing technical assistance for the particular industry.<sup>7</sup>

### 2.4.2.1 Minnesota Technical Assistance Program

The Minnesota Technical Assistance Program (MnTAP) was established over 10 years ago under Minnesota’s Office of Environmental Assistance and is located at the University of Minnesota. The Program’s nonregulatory technical assistance helps Minnesota’s manufacturing and service industries protect the environment by providing practical alternatives for properly

**Figure 2. Summary of Site Visits by Type of Business, 1994-1995**

Type of Business	Number of Site Visits
Food manufacturing	20
Printing & publishing	17
Chemical manufacturing	15
Rubber & plastic products manufacturing	19
Primary metal industries	16
Fabricated metal products manufacturing	42
Industrial & commercial machinery & computer equipment mfg.	31
Electronic & electric equipment manufacturing	14
Transportation equipment mfg.	17
Educational services	10
Other businesses	72

managing waste and preventing pollution of land, air and water. Specific services available include telephone and on-site assistance, a intern program for business, an information clearinghouse and training/workshops.

#### 2.4.2.1.1 Telephone assistance

Each quarter Minnesota Technical Assistance Program receives approximately 300 telephone inquiries, about 10 percent of them from environmental consulting firms. A variety of large and small Minnesota industries, from metal fabricating and finishing to dry cleaners and printers, have requested telephone assistance in the following areas:

- Less-toxic and hazardous raw materials to use in manufacturing operations.
- Process or equipment redesign or upgrading to prevent pollution.
- Environmentally acceptable options for transporting, disposing, or recycling industrial waste.
- Waste management and regulatory compliance.<sup>8</sup>

#### 2.4.2.1.2 Site visits

Generally, a site visit has the following components:

- A meeting with the company representative to clarify objectives of the visit.
- A plant walk-through.
- A follow-up meeting to restate objectives, summarize what was observed, provide readily available information and identify next steps.

The site visit is always followed by a letter and additional printed materials from the technical assistance staff person laying out waste reduction and waste management considerations. During 1994 and 1995, the Program staff conducted 273 site visits.<sup>9</sup> Figure 2 summarizes the number of site visits by type of business.

#### 2.4.2.1.3 Student intern program

The Minnesota Technical Assistance Program intern program has a primary objective of placing students in industrial facilities to implement pollution prevention measures as technical solutions to regulatory and industrial needs.

Typical steps in an intern project include assessment, information gathering, identification of opportunities, technical and economic feasibility, and implementation, where time allows. Students produce a report that contains recommendations for pollution prevention implementation for the company. Students present project results to the company and the staff of the Minnesota Technical Assistance Program. The staff then document results and provide needed additional assistance.

During 1994 and 1995, eight interns were placed, bringing the total since the program began in 1985 to 60. Waste and emissions reduced since 1985 on an annual basis total more than 1,341,000 pounds (plus 10 million gallons of water) with a cost savings of approximately \$654,000.<sup>10</sup>

## 2.5 Enforcement

Enforcement programs can also be designed in ways that promote voluntary compliance. In the United States, enforcement officials traditionally have had broad discretion to decide not to pursue an enforcement action if there are substantial mitigating factors. In the environmental field, self-reporting of violations and prompt correction are important factors in deciding whether an enforcement action should be pursued. These same factors are also important in determine whether a civil or criminal enforcement action should be initiated and what, if any penalty should be imposed.

Voluntary compliance can be stimulated by clearly communicating to regulated organizations that they will be treated more favorably if they seek-out violations within their operations, and promptly report and correct those violations. Several programs in the United States follow this approach. These include the U.S. Environmental Protection Agency's December 1995 policy on "Incentives for Self-Policing"<sup>11</sup> and the United States Sentencing Commission proposed guidelines for sentencing corporate officials convicted of federal environmental crimes.

### 2.5.1 Environmental improvement pilot program

The Minnesota Environmental Improvement Act of 1995<sup>12</sup> establishes a four-year pilot project to encourage environmental auditing. The Act supports auditing efforts by waiving penalties in most cases where companies and governmental units audit their facilities, report problems and commit to prompt correction of the problems they identify.

As an alternative to an audit, the Act authorizes businesses and governmental units to use a new self-evaluation checklist if they do not have the expertise to conduct internal audits or cannot afford the cost of an external audit. Finally, the Act allows participating companies and governmental units to be recognized for their efforts by authorizing their facilities to display a "green star" emblem that indicates the facility is in compliance with environmental requirements.

The Act should benefit businesses and governmental units by providing better information about their operations, encouraging them to learn more about the environmental requirements that apply to their facilities, and by providing increased certainty about how they will be treated in the enforcement process. It will benefit the environment by assuring that many more facilities meet or exceed the state's environmental expectations. In the first six months, eight audits covering 18 facilities have been submitted to the Minnesota Pollution Control Agency. The program is run by the equivalent of two full time staff.

## 3 CONCLUSION

Laws and regulations that ensure a minimum level of environmental and public health protection and firm enforcement of these norms remain the core of effective environmental programs in the United States. These efforts can be significantly enhanced by creating additional incentives for environmental improvement. By aligning internal company incentives (personal values, efficiency, liability reduction, competitiveness) with government incentives (penalty mitigation, permit flexibility and regulatory reform) together with external incentives (increased access to capital and insurance as well as increased attractiveness to the financial market) everyone wins. The results of these efforts should be decreased risks and costs, substantially-increased voluntary compliance, an enhanced ability for enforcement organizations to target their limited resources on the worst problems and offenders, and most important, improved environmental quality.

## ENDNOTE AND REFERENCES

1. Porter, M. and Vander Linde, Co., *Harvard Business Review*, Sept. - Oct. 1995, p. 122.