ATTACHMENT 1 KRA I-D D.2

Minnesota Pollution Control Agency

ATT 1

April 25 , 1995

Ms. Carol Browner
Administrator
U.S. Environmental Protection Agency
401 M Street Southwest
Mail Code A-100
Washington, DC 20460

RE: Project XL Proposals

Dear Ms. Browner:

Enclosed is an April 7, 1995, memorandum to U.S. Environmental Protection Agency (EPA) Region V, expressing Minnesota's strong interest in developing innovative multi-media permits on a pilot project basis. The Minnesota Pollution Control Agency (MPCA) is very interested in undertaking two or three pilot projects under the "Project XL" priority action item outlined in the President Clinton's and Vice President Gore's March 16, 1995, document titled, Reinventing Environmental Regulation.

The innovative multi-media permits the MPCA would develop, builds off of the air quality permit that the MPCA and EPA developed for 3M's tape plant in Minnesota. The permit, often referred to as the 3M flexible permit, provides the company with operational and administrative flexibility while reducing the air emissions 50 percent below what is required by state or federal regulations. The proposed pilot projects are intended to be multi-media and would, therefore, also address water quality and hazardous waste regulations in addition to air quality regulations. The innovative approach will be beneficial for the following reasons:

1) pollution prevention/environmental benefit - one project involves an enforceable 25 percent reduction in emissions;

2) company flexibility - the participating company would propose alternative regulatory approaches to obtain operational and administrative flexibility; and

3) state/federal savings - the state and federal regulatory agencies would save man-hours by having less regulatory oversight.

520 Lafayette Rd. N.; St. Paul, MN 55155-4194; (612) 296-6300 (voice); (612) 282-5332 (TTY)
Regional Offices: Duluth • Brainerd • Detroit Lakes • Marshall • Rochester

18 pp

Minnesota is currently ready to undertake two projects. The two identified projects are with a 3M facility located in Hutchinson, Minnesota, and a U.S. Filter facility located in St. Paul, Minnesota. In addition, the MPCA is currently working with the mining industry in an attempt to identify a Minnesota mining facility to take part in the pilot projects. The MPCA is interested in pursuing a pilot with the mining industry because we believe it will enhance progress on the Common Sense Initiative (CSI) with this industry. The iron and steel CSI subgroup has identified this pilot as an opportunity to participate, or monitor for results, in its work plan.

The proposed Minnesota pilot's would also involve a level of independent oversight and project evaluation. At this time, the University of Minnesota is preparing a pollution prevention grant application. The grant would be used to evaluate the effectiveness of the proposed multi-media projects outlined above.

Because the Project XL initiative is so new, the MPCA is expressing a strong interest through this letter in an effort to obtain the needed federal authority to undertake the pilot projects. Therefore, the MPCA is requesting your assistance in the identification of the person EPA intends to assign in identifying and selecting Project XL candidates. Finally, because Minnesota is ready to undertake two or three projects at this time, any assistance you can lend in: announcing Minnesota's interest in Project XL to appropriate parties; or help in expediting approval of the proposed pilot projects, would be greatly appreciated.

If you have any questions concerning this letter, please do not hesitate to call me at (612) 296-7301, or Lisa Thorvig, of my staff, at (612) 296-7331.

Sincerely,

Charles W. Williams
Commissioner

CWW:lmg

Enclosure

cc: Stephen Harper, EPA
Tom Looby, Colorado Dept of Health
Mary Gade, Illinois EPA
Robbie Roberts, ECOS

STATE OF MINNESOTA

OFFICE OF THE GOVERNOR
130 STATE CAPITOL
SAINT PAUL 55155

ARNE H. CARLSON
GOVERNOR

RRPP
I-D
D.2

June 16, 1995

JUN 19 1995

Ms. Carol Browner, Administrator
U. S. Environmental Protection Agency
401 M Street Southwest
Mail Code A-100
Washington, DC 20460

RE: Minnesota Project XL Proposal

Dear Ms. Browner:

Enclosed is Minnesota's proposal to conduct a "State of Minnesota" project under the "Project XL" priority action item outlined in President Clinton's and Vice President Gore's March 16, 1995, document titled, Reinventing Environmental Regulation and noticed in the May 23, 1995, Federal Register. The state of Minnesota and the Minnesota Pollution Control Agency (MPCA) request approval to undertake one state project, which would consist of three to five pilot projects.

Minnesota is currently ready to undertake one pilot. The identified pilot is with a 3M facility located in Hutchinson, Minnesota. The MPCA is working to identify pilots in several other industries including: mining; printing; electric utility; and hazardous waste recycling. Lastly, assuming the success of the initial pilots, the MPCA would like to keep the door open for other possible projects, based upon available state resources and the ability to apply the results of the pilot projects on a larger scale.

The Minnesota proposal outlines an innovative partnership with the U. S. Environmental Protection Agency (EPA) in implementing the Project XL approach in Minnesota. The proposal also states that Minnesota and 3M had, for a number of months, been developing an innovative permit concept similar to Project XL that we are calling, "Beyond Compliance Permits." Because of the work completed on the Beyond Compliance concept, Minnesota is excited about the Project XL opportunity to conduct pilot projects. In light of this, you will find a fairly well-developed proposal from 3M enclosed. This is intended as an example of the type of pilots Minnesota would like to implement upon EPA approval.

In summary, Minnesota is submitting this Project XL proposal to EPA for approval to conduct a "Minnesota Project" consisting of three to five pilots. Minnesota believes Project XL provides an exciting opportunity to change the way we conduct our business, resulting in a "cleaner, cheaper and smarter" approach to environmental regulation. Minnesota looks forward to the opportunity to present this proposal in more detail at the June 16, 1995, meeting at EPA headquarters. We plan to present this proposal in an interactive manner in an effort to answer all questions EPA staff may have concerning the Minnesota approach. Minnesota hopes the presentation of this proposal will result in an expedited response to move Project XL forward as the innovative permitting approach for the future of environmental regulations.

Finally, Minnesota would like to commend the EPA in its quick response to the development and implementation of the Project XL initiative. Specifically, we would like to commend your staff for the assistance provided to Minnesota to make this proposal possible and their flexibility in setting up the June 16, 1995, presentation of the proposal to EPA staff.

Warmest regards,

ARNE H. CARLSON
Governor

Hubert H. Humphrey, III
Attorney General

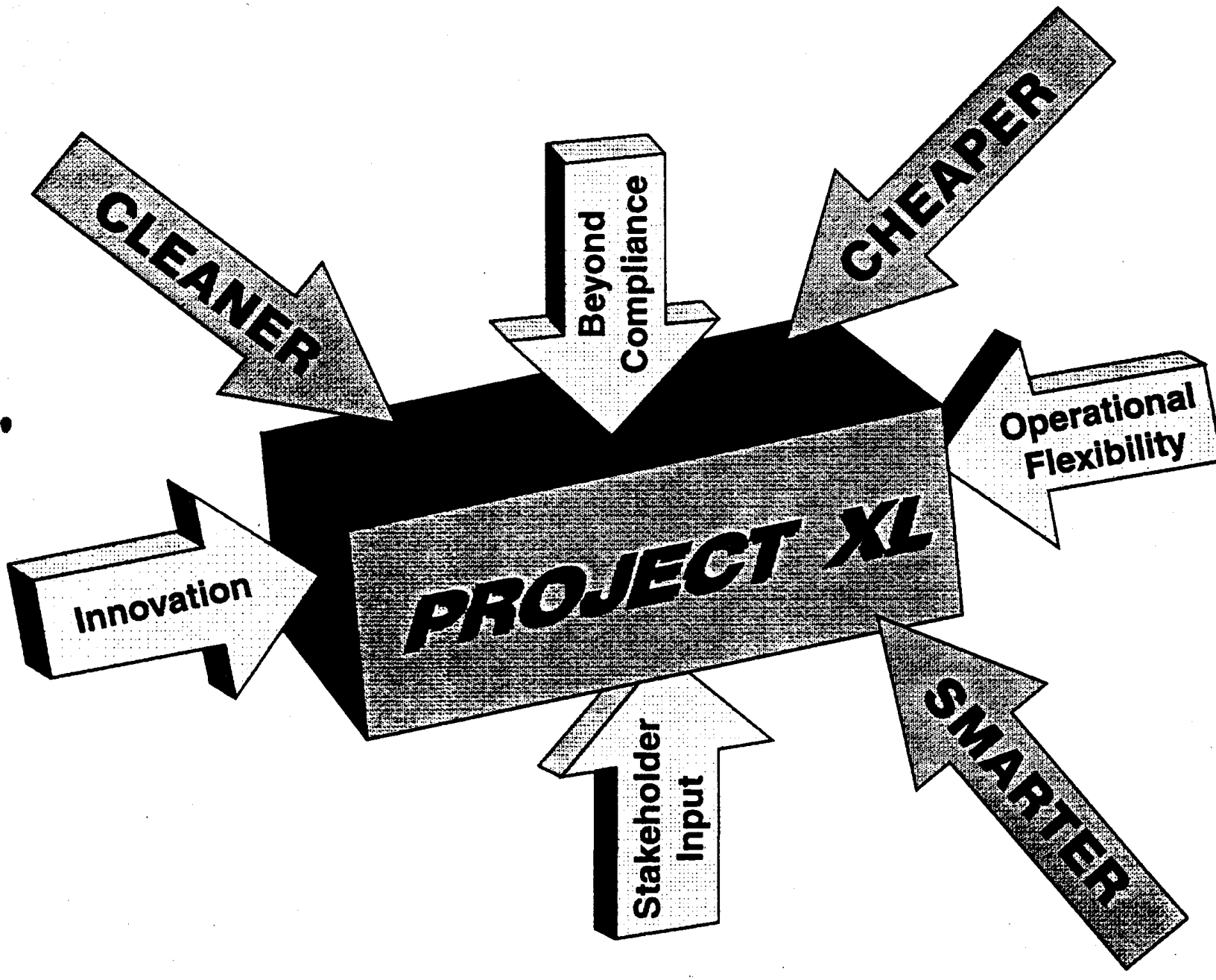
Charles W. Williams
Commissioner

AHC/PCA/jeh

Enclosure

cc: Jon Kessler, Headquarters
Alex Cristofaro, Headquarters
Judy Beck, EPA - Region V
Lisa Thorvig, MPCA, Air Quality

MINNESOTA
Project XL Proposal



Submitted to the U.S. Environmental Protection Agency

Minnesota Pollution Control Agency

June 1995

MINNESOTA PROJECT XL PROPOSAL

I. BACKGROUND

The State of Minnesota and the Minnesota Pollution Control Agency (MPCA) request the U.S. Environmental Protection Agency delegate to the MPCA the ability to undertake one state project consisting of three to five pilot projects under the "Project XL" priority action item outlined in President Clinton's and Vice President Gore's March 16, 1995, document entitled, "Reinventing Environmental Regulation".

Recent letters from Minnesota to the EPA expressing Minnesota's interest in pursuing innovative permitting approaches are attached (Attachment 1). One of the letters dated April 25, 1995, to Carol Browner formally expresses Minnesota's interest in participating in the Project XL pilots. Attached to the Carol Browner letter is a memorandum to EPA Region V, Deputy Administrator, Mr. David A. Ullrich, entitled "Changing the Way We Do Business; Exploring Regulatory Innovation Projects" dated March 15, 1995.

In the memorandum to Mr. Ullrich, the MPCA outlined a proposal to implement an innovative permitting approach encouraging going beyond compliance and pollution prevention in return for regulatory flexibility. Unknown to the MPCA at the time, the next day (March 16, 1995) the President released the document titled, "Reinventing Environmental Regulation." One priority action outlined in the President's proposal is titled "Project XL." Project XL, like this MPCA proposal, is an innovative permitting initiative to encourage companies (on a pilot scale basis) to go beyond current regulatory requirements in return for regulatory flexibility.

As indicated in the memorandum to Mr. Ullrich, the MPCA has been working on beyond-compliance/innovative approaches to permitting since 1992, well before the Project XL concept was developed. The MPCA believes Project XL provides a vehicle for the expeditious implementation of these projects. The 1993 flexibile permit issued to 3M by the MPCA, with the concurrence of EPA, took more than nine months from conception to issuance. We hope that MPCA delegation under Project XL will greatly speed the development and permit issuance process.

If authorized under Project XL, the MPCA would develop innovative, multi-media permits building off the flexible air quality permit that the MPCA and EPA developed for 3M's tape plant in St. Paul. The tape plant permit provides 3M with operational and administrative flexibility while reducing the air emissions 50% below requirements in state or federal regulations.

The MPCA proposes to develop pilot projects under Project XL. The pilot projects are intended to be multi-media and would therefore also address water quality and hazardous waste regulations in addition to air quality regulations. This innovative approach will be beneficial for the following reasons:

1) Environmental Results - The projects goal will be to create an enforceable document requiring significant emissions reduction beyond current state and federal regulations and encouraging pollution prevention.

2) Cost Savings and Paperwork Reduction - The participating company would propose alternative regulatory approaches to obtain maximum operational and administrative flexibility in order to realize cost savings. The state and federal regulatory agencies would save staff-hours and reduce paperwork through less regulatory oversight.

3) Stakeholder Support - The Pollution Prevention Dialogue was formed in late 1994 by the University of Minnesota under a grant from the Joyce Foundation. This multi-stakeholder group consists of representatives from industry, government, environmental advocacy organizations, the legal profession, environmental engineering consultants, and academia. The Beyond Compliance permitting concept orginated in this group, and they will advise and oversee the MPCA pilot projects. In addition, the University of Minnesota is preparing an EPA pollution prevention grant application to evaluate the effectiveness of the proposed multi-media projects outlined in this proposal and to see if regulatory flexibility encourages pollution prevention. Further, the MPCA will evaluate each individual pilot project to determine whether additional stakeholders are necessary. Pilot specific stakeholders may be the community, neighboring states, or Indian tribes.

4) Innovation/Multi-Media Pollution Prevention - Each project will be multi-media and will encourage pollution prevention as one method to continue achieving environmental benefit beyond current regulations. The prime focus of the stakeholder group is to monitor the beneficial impact on pollution prevention through regulatory flexibility and an enforceable commitment to improve environmental results.

5) Transferability The MPCA proposal is to conduct pilots in a variety of industrial sectors to see if this approach works for different industry sectors. Because of this, we believe that we have a greater chance of success on addressing transferability than other projects that may be proposed under Project XL. In addition, the Pollution Prevention Dialogue is keenly interested in whether the beyond compliance concept is transferable to other industries. The Pollution Prevention Dialogue intends to issue a report that addresses the transferability issue. Also one of the pilot projects will be with 3M's Hutchinson, Minnesota facility. Hutchinson, Minnesota is attainment for all pollutants. 3M intends to propose one Project XL pilot for the Hutchinson, Minnesota facility as well as at two other facilities located in nonattainment areas in Illinois and California. Through this effort 3M intends to address transferability between attainment and

nonattainment areas and well as how the projects are managed by different government regulatory agencies.

6) Feasibility The proposed pilots will operate under an enforceable document, likely a permit. The permit will require real time monitoring of the enforceable beyond compliance requirements. The MPCA is confident, based on our experience with the 3M Tape Plant flexible permit, that it is feasible to undertake the type of pilot projects MPCA is proposing under Project XL. Furthermore, the MPCA is not interested in wasting valuable staff resources on infeasible projects.

7) Monitoring, reporting and evaluation This is essential for each pilot project the MPCA undertakes. We will work with the pilot facility to establish baselines on environmental performance, economic/production, community/stakeholder involvement, management systems and timelines. We will require monitoring on the impact of the pilots on each of these baselines. (The environmental monitoring will be required under the enforceable document at a minimum.) Understanding not only the environmental benefit, but also the economic, community, management and timing impacts is essential in order to evaluate the effectiveness and transferability of these pilot projects. MPCA intends to devote at least one work year of effort in monitoring, reporting and evaluating the pilot projects. In addition, the Pollution Prevention Dialogue will monitor and issue a report from the stakeholder perspective, and if the EPA pollution prevention grant is awarded to the University of Minnesota, another report will be developed based on the independent monitoring conducted under this grant.

8) Shifting of risk burden The MPCA will evaluate each pilot project proposal to ensure that in order to achieve superior environmental performance at one industrial facility, the risk is not shifted to a different facility. We believe the emphasis on muti-media permitting will significantly enhance the understanding in this area.

9) Other benefits The MPCA proposal is intended to compliment the efforts we are involved in under the Common Sense Initiative for Iron and Steel and for the Printing Industry, and the Great Printers Project. In addition, members of the Pollution Prevention Dialogue group are active in the national sustainable development work for the automobile industry and will bring ideas to the MPCA project from that effort.

Minnesota is currently ready to undertake the first pilot. The identified pilot is the 3M facility located in Hutchinson. The MPCA has also been evaluating possible pilots with a U.S. Filter facility (a hazardous waste recycling facility) located in St. Paul, Minnesota, the printing industry, the mining industry, and the utility industry in Minnesota. In addition, assuming the success of initial pilots, the MPCA would like to keep the door open for other possible projects, based upon available state resources and the ability to apply the results of the pilot projects on a larger scale.

II. PROPOSAL DESCRIPTION

A. Minnesota Proposal

1. Number of Pilots Projected

At this time, 3M is committed to developing an enforceable compliance document with Minnesota to require 3M to enact pollution prevention/emission reductions beyond current requirements. As other pilot projects are accepted, they would develop similar compliances document with Minnesota. In return, the participating companies would propose alternative approaches which would provide regulatory flexibility.

In addition to the 3M pilot referred to above, the MPCA anticipates two to four additional pilots to be initiated under the Project XL approach. The additional pilots would be phased in as the enforceable documents with the initial sources are executed. At this time, discussions have been initiated with a hazardous waste recycling facility, a mining company, a large utility, and a printing company.

Although the MPCA is currently requesting the approval for a Minnesota Project XL pilot with 3-5 projects, the MPCA requests that EPA authorize the MPCA to have the flexibility to slightly increase or decrease the number as necessary.

2. Community-Based Approach

The MPCA would also like the flexibility to include a community-based pilot under the Project XL approach. This intriguing concept is new to the MPCA, but given Project XL approval the MPCA will investigate this option and then attempt to identify, develop and implement a project in this area.

3. 3M "DRAFT" Proposal Attached

As an example of the type of proposals the MPCA is evaluating, attached is a draft pilot project proposal (Attachment 2). Although the document is only a draft of 3M's proposal for its Hutchinson Plant, it serves as an example of:

⇨ the work and planning under way (previous to Project XL) in Minnesota to identify and implement innovative permitting approaches;

⇨ the readiness of the MPCA to implement Project XL in Minnesota; and

⇨ the effort already invested in developing the framework for a project that trades pollution prevention/emission reductions for regulatory flexibility.

B. Proposal Management

1. MPCA Project Management

The MPCA requests that EPA delegate to the MPCA the ability to lead Project XL pilots in Minnesota. Minnesota will work closely with EPA Region V in the development, issuance and implementation of enforceable documents. While the May 23, 1995, Federal Register notice on Project XL refers to EPA "franchising" with states, the MPCA proposes to lead Project XL in Minnesota. As indicated above, the MPCA is committed to moving forward with identified projects. However, the MPCA is aggressively pursuing the Project XL approval option, because we believe this is the most expeditious manner to overcome the expected limitations of existing federal law.

The MPCA is a great candidate for Project XL because it has a proven track record and leadership in developing innovative approaches to environmental management. Furthermore, approving the MPCA as the lead agency will help EPA stretch resources assigned to develop and implement Project XL proposals. The approval of the MPCA as the lead agency for Minnesota projects would allow the EPA to implement more projects and in an expedited manner. Finally, the MPCA has already appointed a coordinator and will commit necessary resources to provide the necessary coordination throughout the project development and implementation phases.

2. Stakeholder Involvement

Part of the MPCA's leadership role would be to coordinate the involvement of all stakeholders. In this capacity, the MPCA has identified the following stakeholder lists and initiated interaction as follows:

⇨ **Stakeholder Group 1** - Local Community Group

An important aspect in the success of an innovative approach like Project XL is educating and receiving input from the local community. As the lead agency the MCPA would coordinate this effort.

As an example, on Thursday, June 1, 1995, the MPCA, 3M company officials, and interested parties from the Hutchinson area (the proposed location of the 3M project) met to discuss the concept of conducting a beyond compliance

pilot at the 3M Hutchinson plant in their area. A letter expressing support for the pilot project is attached (Attachment 3).

⇨ **Stakeholder Group 2** - Federal, State, and local government regulators

Under this proposal the MPCA would be the lead agency for purposes of project development and implementation. The MPCA would coordinate the interaction of other state and local agencies on an as needed basis.

The EPA will play a major role at both the headquarters and regional levels. The MPCA has initiated informal discussions on both the EPA levels attempting to identify key contacts for project approval, compliance plan development, and project implementation. The MPCA will involve EPA Region V in the development of the enforceable documents, significant policy issues will be discussed with Headquarters and final draft enforceable documents will be public noticed prior to issuance.

⇨ **Stakeholder Group 3** - Participating Company

The participating company plays the critical role in developing and implementing the project. Day to day interaction and coordination with the company in developing the Project XL pilots would be the done by the MPCA.

⇨ **Stakeholder Group 4** - Pollution Prevention Dialogue

The MPCA commonly coordinates the first three stakeholder groups in implementing regulatory programs or taking various regulatory actions. These groups all would have a bias toward their particular area of interest.

The addition of the Pollution Prevention Dialogue would however, bring a unique third party into the process. This multi-stakeholder group would provide independent oversight and advice in each of the proposed pilot projects. The Pollution Prevention Dialogue is a diverse group formed to help evaluate and overcome barriers to implementing pollution prevention projects. The group represents members of industry, environmental advocacy groups, environmental law and consulting companies, Minnesota agencies (such as the MPCA and the Minnesota Attorney General's office), university professors, Minnesota legislators, and other interested professionals.

For a more detailed discussion of the role and the participants of the Pollution Prevention Dialogue refer to Section II.F., below. In addition, a subset of the Pollution Prevention Dialogue called the "Pilot Project Committee" have

submitted to EPA a pollution prevention grant proposal to monitor the results of the pilot projects. A copy of the grant proposal is attached (Attachment 4).

⇨ **Stakeholder Group 5** - Pilot-Specific Stakeholder Groups

The MPCA realizes that due to the nature or location of any specific pilot project other applicable stakeholder groups may be identified. For example, pilot projects may involve specific industry associations, other states, Canada, Indian tribal lands, or other specific groups as identified during the development of a pilot project.

3. Phased Approach

The MPCA plans a several month phase-in approach, depending on the number of initial pilot projects. Like the EPA, the MPCA expects a high amount of interest from companies wanting to participate. Therefore, due to resource limitations, the MPCA anticipates limiting the number of pilots to around 3-5 pilots. The MPCA plans to use the following criteria when evaluating the merits of a proposal:

a. the company's willingness to commit resources to the development and implementation of the pilot;

b. the company's willingness to go beyond compliance with existing regulations;

c. the company's willingness to involve the community and other stakeholders in the pilot project;

d. the transferability to other projects after completion of the pilot project phase;

e. the company's ability and history in complying with regulations;

f. the innovation of the proposed project;

g. the company's location within the State of Minnesota;

h. MPCA staff resource availability; and

i. the availability of information to develop and gain stakeholder agreement on baseline environmental data (e.g. air emissions, water discharges).

The MPCA is proposing to implement the 3M proposal first because it is the most well developed plan for implementing a Project XL-like pilot in Minnesota. In

addition, the 3M proposal meets the above criteria. The proposed location of the 3M pilot project is the Hutchinson Plant located in the City of Hutchinson in rural McLeod County, which is approximately 65 miles west of the Twin Cities.

At the Hutchinson Plant the environmental medium most significantly impacted is air quality. The recently promulgated Magnetic Tape National Emission Standard for Hazardous Air Pollutants (NESHAP) applies to the Hutchinson Plant and will serve as a baseline for this facility. In the air quality medium 3M has proposed to go beyond compliance with the NESHAP requirements. In the water and waste medias, 3M is evaluating the types of reductions that might be made. Other reasons for selecting the 3M proposal first, is its history in developing innovative approaches to environmental concerns, because the plant is located in an attainment area for air pollutants, and because of 3M's demonstrated resource commitment to this project.

C. Project XL Criteria

1. Environmental Results

As mentioned above, participation in the Project XL pilots requires proposals that go beyond requirements of current regulations. For example, the attached 3M proposal set a goal of reducing air emissions beyond the current baseline, including the recently promulgated Magnetic Tape NESHAP. The beyond compliance reductions in the 3M Hutchinson proposal would not necessarily be the goal in all Minnesota projects, but a real, measurable, and enforceable goal for going beyond compliance will be required in all projects. The benefit to the environment will be immediate with measurable reductions of emissions, wastes, and discharges.

2. Cost Saving and Paperwork Reductions

a. Company. The incentive for a company to participate in Project XL would mainly be increased operating flexibility. The regulatory flexibility will result in resource savings and ability to quickly react to changing market conditions. The resource savings would primarily result from less paperwork requirements, through combining and streamlining regulations.

b. Regulatory Agencies. Just as the company benefits from the combining and streamlining regulations, so would the EPA and the MPCA as the regulators. Less paperwork requirements will directly reduce the administrative burden on the regulators.

3. Stakeholder Support

As outlined in detail in the stakeholder section above (Section II.B.2.), the MPCA places a very important emphasis on stakeholder involvement and has identified four main stakeholder groups, and is committed to identify other stakeholder groups, if applicable.

4. Innovation/Multi-media Pollution Prevention

The MPCA believes the Project XL approach will produce a strong incentive to develop innovative approaches to eliminating or reducing emissions. As a result, many of the innovative approaches may be applicable at sources outside the scope of Project XL, thus further benefiting the environment.

Minnesota will place a high emphasis on encouraging innovative approaches to pollution prevention. Minnesota believes the Project XL approach will provide pollution prevention opportunities not feasible under the current regulatory structure. Pilot project participants will be encouraged to look at new ways to implement "beginning of the pipe" pollution prevention solutions, as opposed to depending on "end of the pipe" emission reduction solutions.

Another goal of the Minnesota project would be to create multi-media compliance agreements. The main objective of this goal would be to take requirements from all media and combine them into one less complex and streamlined compliance document. Again over time, the MPCA believes this will be a resource savings through the combining of cross-media resources. Furthermore, the MPCA anticipates the overall process being less complex due to eliminating overlapping regulations and replacing them with easier, more direct, methods of compliance determination.

5. Transferability

Minnesota intends to target pilot projects that are diverse and transferable to similar industries. Assuming success in the initial projects, the MPCA would look toward implementing the Project XL approach on a larger scale. Each of the pilots will have multi-stakeholder group participation. The stakeholders will play an important role in facilitating the transfer of information to other applicable industries. For example, the diversity of the Pollution Prevention Dialogue will play an important role in providing an independent evaluation of the projects, and then helping to promote the transferability to other sectors. Implementation on a larger scale would result in more facilities going beyond compliance, thus benefiting the environment long term.

6. Feasibility

Minnesota intends to only select pilot project proposals in which the company is committed to carrying out the project. Furthermore, the Minnesota intends to select pilot projects which are likely to succeed in every aspect, including the technical and administrative areas of the pilots.

7. Monitoring, Reporting, and Evaluation

As stated above, the MPCA believes monitoring, reporting, and evaluation is essential. Developing a comprehensive, real-time air emissions monitoring system for the 1993 flexible permit at the 3M Tape Plant in St. Paul was one of the most time consuming and successful efforts of that pilot. While monitoring environmental results is essential, it is also important to monitor cost effectivenes, stakeholder satisfaction, company management systems and timelines. The MPCA along with the Pollution Prevention Dialogue will do all of these.

Another goal of the pilots will be to create a less complex regulatory system, whereby it would be is easier to monitor and determine compliance. Because of so many complex and overlapping regulatory requirements, a goal in the development of the compliance document would be to keep it as simple as possible, while insuring monitoring and compliance determination methods are clear and concise. Attaining this goal would have several benefits. One would be to, over time, focus less MPCA resources on compliance determinations for participating sources and shift that resource savings to sources with compliance problems. The benefit to the environment in this regard would be that sources in noncompliance will receive the additional pressure to correct the noncompliance. Another benefit, resulting from the attainment of this goal would be that stakeholders could more easily determine whether a source is in compliance with the agreement, or alternatively, a stakeholder would have easier access to information on the compliance status.

8. Shifting the Risk Burden

Minnesota realizes the importance of environmental justice and is committed to local community involvement as a stakeholder group, thus attempting to balance the risk burden. This draft proposal already outlines in some detail the involvement of the local community stakeholder group for the 3M Hutchinson pilot. Futher, in evaluating all media, the MPCA will be better able to focus on whether pollutants are simply transferred from one media to another or whether true prevention and abatement are occurring.

9. Taking CSI the Next Step

The MPCA is currently working with the printing and mining industries in an attempt to identify a Minnesota mining facility to take part in Minnesota's Project XL pilot. Minnesota is interested in pursuing a pilot with these industries because we believe they will enhance progress on the Common Sense Initiative (CSI) for the printing and iron and steel industries.

10. Bringing Down Economic Expansion Barriers

Assuming success of the Project XL approach, another benefit would be reducing or eliminating the negative economic impacts of environmental regulations in the United States. In today's economy it is becoming increasingly important to be able to compete in a global economy. The streamlining of environmental regulations through innovative approaches would help minimize disincentives caused by regulatory burden, without compromising environmental quality. And in fact, the Project XL pilots would actually result in beneficial impacts on the environment, at the same time reducing the economic burden to companies.

D. Company Benefits

The incentive for a company to participate in Project XL would mainly be increased operating flexibility. The regulatory flexibility will result in resource savings and ability to quickly react to changing market conditions. The resource savings would primarily result from less paperwork requirements, through combining and streamlining regulations.

Secondly, resource savings would result from eliminating the need for obtaining permit modifications. The MPCA anticipates the most benefit would accrue to a company that needs to make changes or modifications quickly due to changing market conditions. However, we also want pilot projects with companies that do not have market conditions driving their production, in order to evaluate how to motivate that type of company to go beyond compliance.

Another benefit of this approach would be to give the company the flexibility to determine how to best implement changes at the source without increasing environmental pollution above an agreed-upon limit. The result will be to give the company incentive to design performance based management practices and control systems to best meet the compliance agreement. This would replace a regulatory system in which the management practices are required and are usually developed by the regulator, with the worst case or lowest common denominator in mind. The

Project XL approach gives an incentive for the company to be creative and design an approach that works best for the participating facility.

E. State and EPA Benefits

As a result of less regulatory oversight and the streamlining of procedures, the MPCA and EPA would save resources while obtaining a significant improvement in the quality of the environment. The primary resource savings would be in the areas of previously required reviews and actions on reports and applications. Assuming success in the early pilots, as the Project XL multi-media approach is used on a larger scale, the MPCA and EPA should also begin to see resource savings through the combining of overlapping programs.

F. Independent Project Evaluation

This proposal includes a unique level of independent oversight and project evaluation.

1. The Pollution Prevention Dialogue (Dialogue) and the Pilot Project Committee (PPC).

The group is large and diverse. A list of the group's participants is included in Appendix A of the grant proposal (Attachment 4). This group will provide oversight and evaluation of the Minnesota pilots. A primary focus of this larger group will be to understand and evaluate the success of the pilot in encouraging pollution prevention and transferring the successes to other industries.

The PPC is a subset of the larger Dialogue group. The groups were organized this way to efficiently interface with the development and oversight of the Minnesota Project XL pilots. As mentioned in the stakeholder discussion above (Section II.B.2.), the participation of the PPC results in a unique third party oversight that will add validity to the development and implementation of the Project XL pilot projects in Minnesota. In addition, the PPC will provide a more detailed interface than could the larger Dialogue group. The focus of the PPC group would be to independently assess the success and failures of the pilot.

2. The University of Minnesota Grant Proposal.

At this time, the University of Minnesota has submitted to the EPA a pollution prevention grant application to evaluate the effectiveness of the proposed Minnesota Project XL pilots. A draft of the grant proposal is attached (Attachment 4). The grant requesters are participants in the Dialogue group and the PPC. Therefore, the flow of information and interaction between all of the

independent groups needed to make these evaluations successful should flow smoothly.

G. ISO 14000 (Environmental Management Systems) Interface

Minnesota intends to evaluate the impacts of at least the 3M pilot in terms of attempting to implement the goals of ISO 14000.

The ISO 14000 goal is to create an international environmental policy that has broad applicability. The environmental policy would then be implemented by an organization through an environmental management system. Some elements of the environmental management system would include:

- implement, maintain, and improve an environmental management system;
- assure conformance with the environmental policy;
- ability to demonstrate conformance to others;
- a certification of the environmental management system by an external organization; and
- self audit conformance with the standard.

The MPCA plans to interface the ISO 14000 goals with the development and implementation of the Project XL pilots. As mentioned in the criteria for pilot project selection (Section II.B.3.), one of the criteria will be to insure the innovative environmental approaches used in the selected pilots are transferable to other regulated facilities. In summary, the MPCA will insure Project XL pilots develop environmental management systems that test the feasibility of the ISO 14000 goals.

II. PROPOSAL DESCRIPTION

A. Minnesota Proposal

1. Number of Pilots Projected

At this time, 3M is committed to developing an enforceable compliance document with Minnesota to require 3M to enact pollution prevention/emission reductions beyond current requirements. As other pilot projects are accepted, they would develop similar compliances document with Minnesota. In return, the participating companies would propose alternative approaches which would provide regulatory flexibility.

In addition to the 3M pilot referred to above, the MPCA anticipates two to four additional pilots to be initiated under the Project XL approach. The additional pilots would be phased in as the enforceable documents with the initial sources are executed. At this time, discussions have been initiated with a hazardous waste recycling facility, a mining company, a large utility, and a printing company.

Although the MPCA is currently requesting the approval for a Minnesota Project XL pilot with 3-5 projects, the MPCA requests that EPA authorize the MPCA to have the flexibility to slightly increase or decrease the number as necessary.

2. Community-Based Approach

The MPCA would also like the flexibility to include a community-based pilot under the Project XL approach. This intriguing concept is new to the MPCA, but given Project XL approval the MPCA will investigate this option and then attempt to identify, develop and implement a project in this area.

3. 3M "DRAFT" Proposal Attached

As an example of the type of proposals the MPCA is evaluating, attached is a draft pilot project proposal (Attachment 2). Although the document is only a draft of 3M's proposal for its Hutchinson Plant, it serves as an example of:

⇨ the work and planning under way (previous to Project XL) in Minnesota to identify and implement innovative permitting approaches;

⇨ the readiness of the MPCA to implement Project XL in Minnesota; and

BRUCE F. VENTO
4TH DISTRICT, MINNESOTA

2304 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-2304
(202) 225-6631

DISTRICT OFFICE
GALTIER PLAZA
175 FIFTH ST., E.
RM. 727 BOX 100
ST. PAUL, MN 55101
(612) 224-4503

HOUSE COMMITTEE ON
NATURAL RESOURCES

CHAIRMAN:
SUBCOMMITTEE ON NATIONAL PARKS,
FORESTS, AND PUBLIC LANDS

HOUSE COMMITTEE ON
BANKING, FINANCE AND
URBAN AFFAIRS

Congress of the United States

House of Representatives

Washington, DC 20515-2304

June 14, 1995

Ms. Carol Browner
Administrator
Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460-0001

Dear Ms. Browner:

I am pleased to provide this letter of support for the Minnesota Pollution Control Agency (MPCA) for their proposal to participate in the Environmental Protection Agency's Project XL initiative. Your approval of this proposal is hoped to significantly improve environmental protection and have a great impact on job creation and security in Minnesota.

An important part of President Clinton's report, "Reinventing Environmental Regulation", describes the Project XL initiative. Project XL would allow certain companies to undertake innovative approaches to achieve emission control beyond the current regulatory requirements via company-directed means. This innovative initiative represents the next step in permitting by state and federal regulators which will allow even more flexibility to achieve greater results in environmental protection.

I have a particular interest in this issue, as the world headquarters for 3M Company is in the district I represent. The state's 3M multi-media flexible permit at the Bush Street Site in Maplewood, Minnesota actually laid the groundwork for participation in Project XL.

I strongly support the grant application submitted to the EPA by the Minnesota Pollution Control Agency. This project will improve environmental protection while at the same time permitting 3M a greater opportunity to compete in a global marketplace. In addition, 3M employs 2000 at its Hutchinson plant and thousands more workers throughout the state of Minnesota. This initiative will have a very positive impact on job creation and security. I urge every due consideration for this important project in our area.

Sincerely,

Bruce F. Vento
Member of Congress

BFV:lah

UNIVERSITY OF MINNESOTA

Twin Cities Campus *Strategic Management Research Center* *822 Management and Economics*
271–19th Avenue South
Minneapolis, MN 55455
612-624-0226
Fax: 612-625-2873

June 14, 1995

Ms. Carol Browner, Administrator
U.S. Environmental Protection Agency
401 M Street SW
Mail Code A-100
Washington, D.C. 20460

Dear Ms. Browner:

As members of the Pilot Project Committee (PPC) of the Pollution Prevention Dialogue we are writing to express our support for the MPCA's proposal to be delegated authority to undertake Project XL pilots in Minnesota.

The Pollution Prevention Dialogue, "Collaborating for a Better Environment and Economy in Minnesota," is a diverse group consisting of representatives from industry, government, environmental advocacy organizations, the legal profession, environmental engineering consultants, and academia. The Dialogue has been convened through the collaborative efforts of the Strategic Management Research Center (SMRC) of the Carlson School of Management, University of Minnesota, the Minnesota Environmental Initiative (MEI), and the Center for Global Change, University of Maryland. The Dialogue has the support of the Minnesota Sustainable Development Initiative and is funded by a grant from the Joyce Foundation.

When first convened, the Dialogue took on the task of finding innovative means to promote pollution prevention (P2) activities and has been seeking additional incentives for P2 or ways of removing existing barriers to it. One of the projects identified by the group was to create a pilot program to examine the advantages of increased regulatory flexibility in Minnesota. Representatives of the MPCA, as participants of the Dialogue, endorsed the idea and agreed to seek ways to implement such a pilot project. Our Pilot Project Committee (PPC) was formed to advise and oversee the pilot project on behalf of the Pollution Prevention Dialogue. Committee members represent a range of constituencies similar to that found in the larger Dialogue group and have an interest in environmental regulation.

Our discussion and endorsement of Minnesota's effort to create a regulatory flexibility pilot project occurred at about the same time and independently of the President's announcement of Project XL. That announcement confirmed to our group that Minnesota's project was consistent with federal policy and suggested that any efforts undertaken by the MPCA should be consistent with the goals of Project XL.

We support the delegation of Project XL authority to the MPCA for several reasons. First, we believe the MPCA has the appropriate experience and expertise to undertake flexible pilot projects. The agency's experience with 3M's St. Paul Tape Plant Permit confirms this point. Second, the MPCA has an excellent working relationship with the various constituencies having an interest in this issue. As the agency's participation in the P2 Dialogue suggests, the MPCA appears keenly interested in finding innovative regulatory approaches that accommodate the goals of environmental protection, pollution prevention, and economic viability. Third, there is significant interest among all stakeholders in developing flexible regulatory approaches in Minnesota that, at the same time, will provide companies with increased incentives and opportunity to introduce significant pollution prevention measures. Fourth, we believe your agency's approval of the MPCA's application will introduce a valuable innovation into Project XL -- namely to demonstrate that such programs can effectively be delegated to the state level.

Another important factor in support of the MPCA's proposal is the existence of our committee as a multi-stakeholder oversight group. As the MPCA proceeds with any pilot projects, the PPC is committed to hold regular meetings at which we review and monitor the projects' progress and to provide comment and advice. In addition, we will work to

3M Hutchinson Stakeholder Committee Members

Jeff M. Schmidt - Middle School Science Teacher

Richard Crawford - Hutchinson Leader

Vi Thayer - Executive Director - Hutchinson Area Chamber of Commerce

John Bernhagen - Mn Technology, Inc / former State Senator

Bev Wangerin - McLeod County Commissioner

Marlin Torgerson - Mayor City of Hutchinson

Sheldon Nies McLeod County Commissioner

Randy DeVries Director of Water & Wastewater operat.

Roger K. Olson 3rd District American Legion Commander

Dick Higgins HTI - Environmental/Safety Manager.

Gale Ness State Representative - Dist 20 A

Steve Dille State Senator Dist 20

Janis Rannow KARP radio, newsdirector
Glencoe-Hutchinson

Minnesota Environmental Coalition of Labor and Industry

312 West First Street
Duluth, MN 55802
1-800-642-7620

TO: MECLI MEMBERSHIP

PER THE JUNE 6 MECLI MEETING, ENCLOSED IS THE DRAFT POSITION STATEMENT PERTAINING TO THE "PROJECT X/L PILOT EFFORTS". IF YOU HAVE ANY COMMENTS, PLEASE CALL THE MECLI OFFICE AT 1-800-642-7620 BY JUNE 12. THANK YOU.

The Minnesota Environmental Coalition of Labor and Industry (MECLI) is comprised of more than 70 unions, businesses and their trade associations. Representing thousands of working people, MECLI's mission is to provide a forum where members of the labor and business communities can work together to develop sound environmental policy that promotes the creation and retention of Minnesota jobs.

MECLI strongly supports the Minnesota Pollution Control Agency (MPCA) and 3M/Hutchinson in seeking Environmental Protection Agency (EPA) approval for a Project Excellence and Leadership (XL) pilot.

Background: President Bill Clinton and Vice President Al Gore have initiated "Re-inventing Environmental Protection". This initiative encompasses a number of approaches, including "Project Excellence in Leadership " (X/L). Such X/L Pilot Projects are being solicited from the fifty states to assist the development and progress of the concept.

The MPCA has worked for additional flexibility in getting improved environmental results. In 1993, the MPCA awarded the first-in-the-nation "Flexible Air Permit" for 3M/St. Paul Tape Plant.

3M is now partnering with the MPCA to propose 3M/Hutchinson to be one of the national pilots for Project X/L. The objectives of such pilots is to achieve ever lower environmental releases while protecting jobs in America.

The pilot programs selected will be given the flexibility to develop alternative strategies that will replace or modify specific regulatory requirements on the condition that they produce greater environmental benefits. In exchange for greater flexibility, regulated entities will be held to a higher standard of accountability.

These very principles are strongly supported by MECLI, and therefore the Coalition is in strong support of this application and the opportunity for such advances in Minnesota.

Minnesota Environmental Coalition of Labor and Industry

312 West First Street
Duluth, MN 55802
1-800-642-7620

TO: MECLI MEMBERSHIP

PER THE JUNE 6 MECLI MEETING, ENCLOSED IS THE DRAFT POSITION STATEMENT PERTAINING TO THE "PROJECT X/L PILOT EFFORTS". IF YOU HAVE ANY COMMENTS, PLEASE CALL THE MECLI OFFICE AT 1-800-642-7620 BY JUNE 12. THANK YOU.

The Minnesota Environmental Coalition of Labor and Industry (MECLI) is comprised of more than 70 unions, businesses and their trade associations. Representing thousands of working people, MECLI's mission is to provide a forum where members of the labor and business communities can work together to develop sound environmental policy that promotes the creation and retention of Minnesota jobs.

MECLI strongly supports the Minnesota Pollution Control Agency (MPCA) and 3M/Hutchinson in seeking Environmental Protection Agency (EPA) approval for a Project Excellence and Leadership (XL) pilot.

Background: President Bill Clinton and Vice President Al Gore have initiated "Re-inventing Environmental Protection". This initiative encompasses a number of approaches, including "Project Excellence in Leadership " (X/L). Such X/L Pilot Projects are being solicited from the fifty states to assist the development and progress of the concept.

The MPCA has worked for additional flexibility in getting improved environmental results. In 1993, the MPCA awarded the first-in-the-nation "Flexible Air Permit" for 3M/St. Paul Tape Plant.

3M is now partnering with the MPCA to propose 3M/Hutchinson to be one of the national pilots for Project X/L. The objectives of such pilots is to achieve ever lower environmental releases while protecting jobs in America.

The pilot programs selected will be given the flexibility to develop alternative strategies that will replace or modify specific regulatory requirements on the condition that they produce greater environmental benefits. In exchange for greater flexibility, regulated entities will be held to a higher standard of accountability.

These very principles are strongly supported by MECLI, and therefore the Coalition is in strong support of this application and the opportunity for such advances in Minnesota.

Minnesota Pollution Control Agency

April 7, 1995

Mr. Valdas V. Adamkus
Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: Changing the Way We Do Business: Exploring Regulatory Innovations Pilot Project

Dear Mr. Adamkus:

I am sending you a March 15, 1995, memorandum regarding a pilot project that the Minnesota Pollution Control Agency (MPCA) is proposing to undertake with the assistance of the U.S. Environmental Protection Agency (EPA). The purpose of the pilot project is to work with three to four industries to develop permits or other compliance documents which is aimed at reducing the company's environmental administrative and operational costs and achieving environmental performance beyond what is required by existing regulations.

My staff intended to provide Dave Ullrich with this memorandum at the joint EPA Region V and Region V states meeting held on March 16, 1995. However, because of the full agenda and the many important topics being discussed, we were not able to do this. My air and hazardous waste managers were able to find the time to provide your air and hazardous waste directors with a copy of the enclosed memorandum.

This pilot project builds off of the air quality permit that MPCA and EPA developed for 3M's tape plant in Minnesota. This permit, often referred to at the 3M flexible permit, provides the company with operational and administrative flexibility while reducing air emissions 50 percent below what is required by state or federal air quality regulations. This pilot project is intended to be multi-media and will address not only air quality regulations but also water quality and hazardous waste regulations.

We are attempting to interest one of Minnesota's iron mining industries in participating in this pilot in the hope that it will enhance progress on the Common Sense Initiative (CSI) for the Iron and Steel industry. However, even if a mining industry does not participate directly, the CSI for Iron and Steel intends to follow this pilot quite closely. In fact, at their recent meeting in March 1995, the CSI for Iron and Steel voted to include this pilot in its workplan.

520 Lafayette Rd. N.; St. Paul, MN 55155-4194; (612) 296-6300 (voice); (612) 282-5332 (TTY).
Regional Offices: Duluth • Brainerd • Detroit Lakes • Marshall • Rochester

UNIVERSITY OF MINNESOTA

Twin Cities Campus *Strategic Management Research Center* *822 Management and Economics*
271–19th Avenue South
Minneapolis, MN 55455
612-624-0226
Fax: 612-625-2873

June 14, 1995

Ms. Carol Browner, Administrator
U.S. Environmental Protection Agency
401 M Street SW
Mail Code A-100
Washington, D.C. 20460

Dear Ms. Browner:

As members of the Pilot Project Committee (PPC) of the Pollution Prevention Dialogue we are writing to express our support for the MPCA's proposal to be delegated authority to undertake Project XL pilots in Minnesota.

The Pollution Prevention Dialogue, "Collaborating for a Better Environment and Economy in Minnesota," is a diverse group consisting of representatives from industry, government, environmental advocacy organizations, the legal profession, environmental engineering consultants, and academia. The Dialogue has been convened through the collaborative efforts of the Strategic Management Research Center (SMRC) of the Carlson School of Management, University of Minnesota, the Minnesota Environmental Initiative (MEI), and the Center for Global Change, University of Maryland. The Dialogue has the support of the Minnesota Sustainable Development Initiative and is funded by a grant from the Joyce Foundation.

When first convened, the Dialogue took on the task of finding innovative means to promote pollution prevention (P2) activities and has been seeking additional incentives for P2 or ways of removing existing barriers to it. One of the projects identified by the group was to create a pilot program to examine the advantages of increased regulatory flexibility in Minnesota. Representatives of the MPCA, as participants of the Dialogue, endorsed the idea and agreed to seek ways to implement such a pilot project. Our Pilot Project Committee (PPC) was formed to advise and oversee the pilot project on behalf of the Pollution Prevention Dialogue. Committee members represent a range of constituencies similar to that found in the larger Dialogue group and have an interest in environmental regulation.

Our discussion and endorsement of Minnesota's effort to create a regulatory flexibility pilot project occurred at about the same time and independently of the President's announcement of Project XL. That announcement confirmed to our group that Minnesota's project was consistent with federal policy and suggested that any efforts undertaken by the MPCA should be consistent with the goals of Project XL.

We support the delegation of Project XL authority to the MPCA for several reasons. First, we believe the MPCA has the appropriate experience and expertise to undertake flexible pilot projects. The agency's experience with 3M's St. Paul Tape Plant Permit confirms this point. Second, the MPCA has an excellent working relationship with the various constituencies having an interest in this issue. As the agency's participation in the P2 Dialogue suggests, the MPCA appears keenly interested in finding innovative regulatory approaches that accommodate the goals of environmental protection, pollution prevention, and economic viability. Third, there is significant interest among all stakeholders in developing flexible regulatory approaches in Minnesota that, at the same time, will provide companies with increased incentives and opportunity to introduce significant pollution prevention measures. Fourth, we believe your agency's approval of the MPCA's application will introduce a valuable innovation into Project XL -- namely to demonstrate that such programs can effectively be delegated to the state level.

Another important factor in support of the MPCA's proposal is the existence of our committee as a multi-stakeholder oversight group. As the MPCA proceeds with any pilot projects, the PPC is committed to hold regular meetings at which we review and monitor the projects' progress and to provide comment and advice. In addition, we will work to

SF-00006-05(4/86)

DEPARTMENT: POLLUTION CONTROL AGENCY

STATE OF MINNESOTA

Office Memorandum

DATE: March 15, 1995

TO: David A. Ullrich
Deputy Regional Administrator
U.S. EPA/Region V

Thru: Ann Glumac, MPCA Deputy Commissioner

From: Lisa J. Thorvig, Manager
Air Quality Division

Tim Scherkenbach, Manager
Hazardous Waste Division

PHONE: (612) 296-7331 (612) 297-8502

SUBJECT: Changing the Way We Do Business: Exploring Regulatory Innovations Pilots

The Minnesota Pollution Control Agency (MPCA) is proposing to conduct three to four permitting pilots that build off the 3M flexible air emissions permit that was issued by the MPCA in 1993 with the approval of the U.S. Environmental Protection Agency (EPA). 3M, MPCA and EPA successfully negotiated an innovative air quality permit for a 3M facility (located in St. Paul, Minnesota) which provides precedent-setting operational flexibility and, at the same time, results in significant air emissions reductions. (See attached description for more detail on the 3M Flex Permit.)

As a result of this innovative air permit, 3M has drafted national legislation that would provide for increased business flexibility and reduced paper work resulting from environmental regulations (including requirements of the Clean Air Act, the Clean Water Act and the Resource Conservation and Recovery Act) in exchange for significant environmental benefit (beyond what is required by the environmental regulations). A description of 3M's Beyond Compliance Program is attached to this memorandum.

The pilots the MPCA is proposing would be to try implementing the 3M Beyond Compliance Program. However, in order to do this, we need not only EPA support, but also EPA participation in drafting and approving issuance and implementation of permits or other appropriate compliance documents for these pilot projects. The pilots under discussion would allow for optional approaches for dealing with federal requirements such as the RCRA permitting requirements and the CAA prevention of significant deterioration (PSD) requirements. As a result, we will need both EPA Region V and Headquarters approval.

We currently have two companies very interested in the Beyond Compliance pilots, and may have one or two additional companies interested in participating in the pilots. The first is U.S. Filter, which is a company that operates a commercial hazardous waste facility in Roseville, Minnesota, and receives wastes from both foreign and domestic sources. Hazardous waste management capabilities at their facility include storage, treatment, recovery and transfer of liquid, semisolid and solid wastes. The proposed pilot would expand the treatment and recycling of certain hazardous wastes not presently managed.

The second company is 3M, which has a plant in Hutchinson, Minnesota that produces magnetic media products. 3M will propose a multi-media pilot that affects all three of the federal environmental laws with the major focus on the CAA. 3M's proposal will be to reduce air emissions 25 percent lower than is required under the CAA and associated federal regulations including the newly promulgated magnetic media MACT standard, and limiting water discharges to current actual levels. In exchange, 3M will propose regulatory flexibility which will include optional approaches for dealing with PSD.

MPCA staff is also discussing a multi-media, Beyond Compliance pilot with Minnesota's iron mining industry. We are very interested in pursuing a pilot with the mining industry because we believe that it will enhance progress on the Common Sense Initiative (CSI) with this industry. At the most recent meeting of the CSI Iron and Steel permitting subgroup, 3M presented its Beyond Compliance Program. The presentation seemed to interest members of this subgroup.

At this time, we would like EPA to approve this pilot conceptually as a worthwhile project to pursue under the joint initiatives outlined as part of the strategic planning efforts involving EPA/ Region V and the Region V States. Specifically, area number three: "To change how we do business to achieve the maximum environmental results by adjusting our various tools, including, but not limited to: ...exploring regulatory innovations..." We hope that this decision can be made in time for designing flexibility into the fiscal year 1996 grant proposals. In addition, we need a commitment from the media programs to assign appropriate policy-level decision-making staff in order to work with MPCA to develop and implement three to four Beyond Compliance Program pilots. We will be receiving proposals from pilot companies and we need to begin negotiating the elements of the pilots as well as the appropriate regulatory compliance documents. Finally, we need EPA/Region V assistance in identifying a champion of this pilot project at EPA headquarters, and in obtaining necessary Headquarters' approvals.

Please let us know if you need more information. We are very excited about this and anxious to move ahead.

LJT:cmbg

Attachments

cc: Val Adamkus, EPA/Region V
David Kee, EPA/Region V/Air
Bill Muno, EPA/Region V/RCRA
Barry DeGraff, EPA/Region V/Water
Chuck Williams, MPCA/CO
Gordie Wegwart, MPCA/CO
Patty Burke, MPCA/Water
Rod Massey, MPCA/Air
Roger Bjork, MPCA/RCRA
Andy Ronchak, MPCA/EPA - IPA

SYNOPSIS

MPCA Air Quality Division
"Flexible" Permit for

3M Bush Street Facility

I. Background and Basic Tenets of Applicable Regulations:

- This facility is an older source which 3M wishes to "renew" or upgrade in order to be able to respond quickly and efficiently to changes in market demands.

- Prior to issuance of this permit, the past actual VOC emissions from this facility were approximately 10,000 tons per year.

- This facility is a major source of Volatile Organic Compound (VOC) emissions and is subject to federal Prevention of Significant Deterioration (PSD) regulations.

- PSD regulations would ordinarily require that 3M apply for and receive an air quality permit for any modification which would have the potential to increase VOC emissions above federal significance levels prior to commencing construction of the modification.

- State regulations require that sources apply for permits for modifications which result in an increase of emissions or result in a change in emissions.

- In 1990, 3M installed 2 pieces of VOC control equipment [oxidizers] which they were not required to operate.

II. Limitations and Compliance Determination:

- The permit limits the potential AND actual emissions of the facility at no more than approximately 4600 tons per year of VOCs ["cap" for VOC emissions].

- The permit requires 3M to test the capture and destruction efficiency of the control equipment and maintain these efficiencies.

- Compliance with the VOC emissions cap must be determined daily with a sophisticated emissions tracking system and Continuous Emission Monitoring [CEM] system by factoring daily emissions into a "rolling" annual total.

- The emissions tracking system accounts for the VOC content of raw materials used in processing, production rates and capture and destruction efficiencies.

- We believe the emissions tracking system and compliance determination portions of this permit represent as high a degree of sophistication as exists anywhere for this type of source.

III. "Flexibility":

- The permit provides authorization for several "categories" of modifications. Under conventional permitting procedure, many of these modifications would require permit amendments. The permit amendment process would not provide 3M with the "flexibility" (short response time) they need to respond competitively to market demands.

- The permit requires 3M to notify the Agency 10 days before beginning actual construction of the modification and provide the Agency with:

  - a description of the change;
  - a schedule for the modification;
  - a statement regarding the applicability of New Source Performance Standards (NSPS);
  - emission calculations for all criteria pollutants (excluding VOCs) resulting from the modification; and
  - a certification that the modification will not result in emissions greater than authorized by the permit.

- The permit provides a methodology for Agency approval of modifications which 3M believes are CONSISTENT with those authorized by the permit [but not specifically listed]. The permit holds the Agency to expeditious determinations for authorization/denial.

- The VOC emissions "cap" provides the "flexibility" of allowing emission changes from individual units.

IV. Who Benefits and How?

- The ENVIRONMENT benefits:

  1. VOC emissions are enforceably limited to less than one-half those previously emitted by this facility.

  2. Sophisticated emissions tracking and compliance determination methodology provides for near "real time" (within 48 hours) documentation of noncompliance. Heightened monitoring allows for more expeditions correction and less environmental damage.

- 3M benefits:

  1. Increased flexibility realized from reduced permitting lead time allows 3M to respond quickly to market demands. Market competitiveness and profitability are increased.

  2. Near "real time" compliance determination reduces environmental "liability" resulting from regulatory or legal action.

PARTNERSHIP MINNESOTA COOPERATIVE PUBLIC SERVICE AWARD 1995 PARTNERSHIP DESCRIPTION

The 3M Bush Street Tape Plant manufactures specialty tapes for a highly competitive and ever-changing market. Pursuant to federal and state air quality regulations, many of the changes that 3M initiates in response to market needs require permit amendments from the MPCA. The permit authorization process for these changes may require several weeks or months to complete.

3M and the MPCA, in conjunction with the U.S. EPA, negotiated an innovative permit which allowed "preauthorization" for many of the changes that 3M anticipated they would need to make in response to market changes. The permit places a total facility "cap" on hydrocarbon emissions which is set far below the level required by applicable federal or state regulations. The permit also contains monitoring and reporting requirements which provide both the MPCA and 3M with more timely emissions data than that which would be required by applicable regulations.

3M maintains that between permit issuance (March, 1993) and January of 1995 they have instituted twenty-one (21) changes at this facility which ordinarily would have required permit action. They estimate that they have saved approximately one thousand, five hundred and thirty (1,530) hours of permit application and other administrative work. This time savings directly benefits their market response time and competitiveness.

The MPCA has benefited in a similar manner. As a result of not needing to process these potential permit actions, the MPCA is devoting these resources to other permittees and being more responsive to their needs.

The TAXPAYERS benefit from this project through IMPROVED AIR QUALITY, development of a MODEL STRATEGY FOR ENHANCED ENVIRONMENTAL COMPLIANCE AND IMPROVED DISTRIBUTION OF LIMITED GOVERNMENTAL RESOURCES TO STAKEHOLDERS.

APPLICATIONS MUST BE RECEIVED BY MARCH 10, 1995

PARTNERSHIP MINNESOTA COOPERATIVE PUBLIC SERVICE AWARD 1995 PARTNERSHIP DESCRIPTION

The 3M Bush Street Tape Plant manufactures specialty tapes for a highly competitive and ever-changing market. Pursuant to federal and state air quality regulations, many of the changes that 3M initiates in response to market needs require permit amendments from the MPCA. The permit authorization process for these changes may require several weeks or months to complete.

3M and the MPCA, in conjunction with the U.S. EPA, negotiated an innovative permit which allowed "preauthorization" for many of the changes that 3M anticipated they would need to make in response to market changes. The permit places a total facility "cap" on hydrocarbon emissions which is set far below the level required by applicable federal or state regulations. The permit also contains monitoring and reporting requirements which provide both the MPCA and 3M with more timely emissions data than that which would be required by applicable regulations.

3M maintains that between permit issuance (March, 1993) and January of 1995 they have instituted twenty-one (21) changes at this facility which ordinarily would have required permit action. They estimate that they have saved approximately one thousand, five hundred and thirty (1,530) hours of permit application and other administrative work. This time savings directly benefits their market response time and competitiveness.

The MPCA has benefited in a similar manner. As a result of not needing to process these potential permit actions, the MPCA is devoting these resources to other permittees and being more responsive to their needs.

The TAXPAYERS benefit from this project through IMPROVED AIR QUALITY, development of a MODEL STRATEGY FOR ENHANCED ENVIRONMENTAL COMPLIANCE AND IMPROVED DISTRIBUTION OF LIMITED GOVERNMENTAL RESOURCES TO STAKEHOLDERS.

APPLICATIONS MUST BE RECEIVED BY MARCH 10, 1995

The Beyond Compliance Emissions Reduction Act of 1994

Executive Summary

Purpose

The principal purpose of the Beyond Compliance Emissions Reduction Act of 1994 is to create environmental improvements far beyond those required by existing environmental regulations and, simultaneously, reduce the transactional and time costs associated with those regulations. The Beyond Compliance Emissions Reduction Act uses the existing statutes as a foundation and allows facilities which operate substantially beyond the requirements of those statutes to move to a performance based system of operation. It is a voluntary alternative which offers flexibility and simplified procedures through a multi-media permit governing air and water emissions and hazardous waste management.

The legislation is designed, therefore, to provide the benefits of significant pollution prevention in return for reduced paperwork and other administrative burdens. At the same time, compliance is assured by a combination of compliance audits, community participation, civil and criminal penalties for violations, citizen suits, and other safeguards.

Comprehensive Environmental Permitting

The Act provides the framework for an alternative method of meeting the operating permit requirements of the Clean Air Act, the discharge permit requirements of the Clean Water Act, and the hazardous waste management requirements under subtitle C of the Solid Waste Disposal Act ("RCRA"). This alternative method, i.e., comprehensive environmental permitting, is achieved through a significant overall pollutant emissions reduction which is permanently "capped" at the reduced level. These caps are performance based standards which substitute for the technology based requirements of the existing regulations. The cap (and the related requirements) set forth in a Beyond Compliance permit replace the most significant permit requirements in the Clean Air Act, the Clean Water Act, and RCRA. However, Beyond Compliance facilities are still subject to all other applicable requirements outside of Clean Air Act operating permits, Clean Water Act discharge permits, and RCRA hazardous waste management requirements under subtitle C.

To determine a facility's appropriate cap level, an applicant for a Beyond Compliance permit must calculate, for the "predominant media," the aggregate allowable emissions under the existing statutory permit scheme using the facility's annual production rate for any of the three previous calendar years and reduce such emission levels by at least 25 percent (or 20 percent for each media if the facility elects to be "double-capped" i.e. for both media). "Predominant media" is the media (air or water) on which the facility's emissions have the greatest environmental impact. The cap for the "nonpredominant media" is set at the facility's actual aggregate emissions level (when operating in compliance with all applicable environmental controls). Emission reductions may be based on past performance so that plants which have already made substantial reductions in the past may also participate in this program.

Emission limits may be calculated on either daily, weekly, monthly, or annual compliance periods. Monthly and annual compliance periods are subject to additional restrictions; monthly limits are subject to daily emission limits no greater than ten percent of the monthly emissions limits, while annual limits are subject to daily emission limits no greater than one percent of the annual emission limits.

In addition to calculating the cap for each media (air and water), a permit applicant must also specify monitoring requirements and/or emission tracking necessary to achieve and maintain compliance with the reduced emissions limits. Moreover, the permit must establish procedures for notifying the State should any

operational changes affect the cap. A facility seeking a Beyond Compliance permit must also be able to accommodate future reductions in emission levels promulgated by the EPA Administrator (or the State) under the existing Clean Air Act and Clean Water Act programs. To keep pace with new laws or regulations, a facility with a Beyond Compliance permit is required to automatically reduce its capped emission levels in direct proportion to emission reductions mandated under any subsequently adopted federal or state requirements.

A key feature of the Act is that it is designed to be self implementing, thereby avoiding the delays, confusion, litigation, and transaction costs inherent in a new approach to regulation. Therefore, states, owners and operators of facilities, and citizens may rely on the language of the Act itself to create and implement a Beyond Compliance permit program.

The authority to implement a Beyond Compliance permit program is granted to the states. Any state may participate in the program by notifying the Administrator and regulated facilities of its intent to create a Beyond Compliance permit program, and by adopting authorizing legislation. Participation is optional; no state is required to implement a Beyond Compliance permit program, and no facility is required to obtain a Beyond Compliance permit.

A system of specific checks and balances is provided that promotes open and expeditious processes for the evaluation and adoption of Beyond Compliance permits. Once a state has authorized a Beyond Compliance permit program, it may start accepting facility permit applications. After submittal of a facility's permit application, the State has up to 60 days to determine whether the application is complete. Once the application is deemed complete, the State must conduct a public hearing on the application, followed by a 30-day comment period. During the review and comment process all permit applications must be available to the community in which the facility is located. As part of the application review process, the Governor must appoint a Local Advisory Council ("LAC") comprised of representatives of affected interests from the community in which the facility is located. The LAC's comments and advice must be taken into consideration by the state during its review of a permit application. At the end of the comment period, the State may either issue the permit as submitted by the applicant or propose a modification. In the interest of preventing procedural delays and confusion, a state's failure to act on a permit application within the time specified will be considered final agency action and subject to immediate judicial review.

Public Participation and Facility Planning Requirements

The Act provides two key types of planning: Beyond Compliance Plans and Community Relations Plans. These plans, prepared by the facility owner with advice from the LAC, are available to the public in their entirety except for any information regarding trade secrets. The requirement to create a Beyond Compliance plan is in addition to the Beyond Compliance permit cap provisions and may be satisfied by submittal of a plan prepared according to a state's pollution prevention planning requirements or as described in section 202 of the Act. Section 202 requires that the contents of a Beyond Compliance plan include a comprehensive inventory of all emissions or releases subject to a facility's Beyond Compliance permit, an evaluation of the pollution prevention alternatives for emissions or releases targeted for reduction, the goals for emissions reduction over two successive five-year periods, and a summary of the activities, decisions, and procedures and financial commitment necessary to implement the facility's Beyond Compliance plan. Part of the Beyond Compliance plan process is the preparation and submittal of Beyond Compliance Progress Reports which include a copy of a facility's toxic chemical

release form under section 313 of the Emergency Planning and Community Right-To-Know Act of 1986, a description of the facility and an identification of each production process, and a numerical statement demonstrating the annual progress of the facility in achieving each of the five-year goals referred to in the Beyond Compliance plan.

Transfer of Waste Reduction Technology

If a facility would otherwise be required to meet the requirements of a hazardous waste minimization plan as required by RCRA, the facility must establish specific waste minimization goals. Accordingly, the facility must include, as part of its Beyond Compliance plan, a goal to achieve the reduction (within a ten year period) in the quantity of hazardous waste that would otherwise be disposed. Progress in meeting the goal would be described in periodic reports as well as annual compliance audit reports.

Product Stewardship

To promote the policy goal of "product stewardship," a credit against the facility's waste reduction goal may be achieved by providing technology to the facility owner's customers which results in the reduction of hazardous waste that would otherwise be disposed of by such customers. The credit may also be obtained if the waste reduction is achieved by products (sold by the facility owner to the customer) that generate less hazardous waste. Certain conditions would preclude the abuse of this credit option: the technology must be supplied at no cost to the customer and the waste reduction must result directly from the application of such technology or the use of the "waste reducing" products manufactured by the facility owner.

Community Relations Planning

The Community Relations planning provisions require a facility applying for a Beyond Compliance permit to conduct a demographic survey of the community in which the facility is located to determine if there are specific community issues which it should address and whether the facility's operations pursuant to a Beyond Compliance permit would cause any significant adverse effects on the community. Once the survey has been completed and the LAC has had the opportunity to review and comment on the results, if there are specific community issues which it should address, the facility must develop a community relations plan that addresses any effects identified during the LAC's review.

Relationship To Other Federal Environmental Laws

Clean Air Act and Clean Water Act - In addition to the flexibility afforded by comprehensive cap levels for air and water pollutants, facilities with Beyond Compliance permits are eligible to use alternative best practicable emission tracking or monitoring methods to assure compliance with Beyond Compliance caps. To assure continuous, long-term environmental protection, Beyond Compliance facilities are required to match any subsequent hazardous air or water pollutant emission requirements with corresponding percentage reductions referred to as "automatic reductions." With respect to air emissions, new facilities and modifications of existing facilities are subject to off-setting and pre-construction monitoring, modeling, and increment protection provision of section 165 of the Clean Air Act, depending on the attainment status of the area in which the facility is located. Compliance with a Beyond Compliance permit does not exclude the facility from other Clean Air Act permitting requirements, such as acid deposition control.

With respect to facilities with water discharges, modifications of existing facilities are subject to the additional requirements of anti degradation review and strict toxic pollutant control. Compliance with a Beyond Compliance permit does not exclude the facility from other Clean Water Act permitting requirements, such as dredge and fill permitting.

Resource Conservation and Recovery Act - Facilities with Beyond Compliance permits may be eligible for special rules governing their management of hazardous waste. Such facilities need not obtain a RCRA permit if they store hazardous wastes for longer than 90 days (or engage in certain authorized recycling activities) *provided* that RCRA's basic regulatory requirements relating to storage and management are complied with. These requirements include general facility standards, manifesting, contingency planning, containers and tank system standards, land disposal restrictions, financial responsibility, and corrective action at hazardous waste recycling and reclamation units. In addition, the reporting and record-keeping requirements that are mandated by title IV of the Beyond Compliance Act must also be adhered to.

A facility with a Beyond Compliance permit that satisfies these basic RCRA requirements (whether or not it stores hazardous waste for more than 90 days) would be eligible to engage in certain recycling and product stewardship activities. Specifically, these activities are: (1) receiving hazardous wastes from customers (provided such wastes are derived from products sold by the facility owner or operator to such customers) and are properly (i) recycled, or (ii) managed in accordance with all permit requirements and other applicable RCRA requirements; (2) reusing hazardous wastes generated on-site or from other facilities owned or operated by the permittee or by the permittee's customers; and (3) reclaiming hazardous wastes for sale as commercial products. The precise parameters of these activities (and the applicable waste management rules) would be specified in the facility's Beyond Compliance permit.

Consolidation of Reporting Requirements/Compliance Certification

Most reporting and record-keeping requirements that are required by the Clean Water Act, Clean Air Act, and RCRA would be replaced by a simplified set of requirements that would provide all the information necessary to establish whether the facility complies with the terms of its Beyond Compliance permit. The emergency spill and release reporting requirements of CERCLA, SARA Title III, and the Clean Water Act would continue to apply. In addition, the owner or operator must certify, on an quarterly basis, that the facility is in full compliance with the terms of its permit.

Compliance Audits

Annual compliance audits, conducted in accordance with a detailed compliance audit plan, would reveal whether the facility is meeting the terms and conditions of its permit. In addition, the audit must include an explanation of (1) any differences between the facility's actual emissions and the Beyond Compliance caps, and (2) what measures that have been or will be taken to assure full compliance. The results of the compliance audit must be submitted to the Administrator, the State and the Local Advisory Council.

Enforcement

Although the enforcement provisions applicable to Beyond Compliance facilities have been consolidated, they are no less stringent than the enforcement provisions under the Clean Air Act, the Clean Water Act and RCRA. Civil penalties include a maximum fine of $25,000 for each day of violation and administrative penalties not to exceed $5000 for each day of violations.

Injunctive relief would be available to deal with facilities causing an imminent and substantial endangerment to health or the environment.

In addition, citizens may bring "citizens suits" to correct any permit violations or abate imminent and substantial endangerment's caused by any violations of a Beyond Compliance permit. Moreover, criminal penalties may be imposed for knowing violations of the permit or false statements. Finally, the legislation includes a "knowing endangerment" provision modeled on similar provisions contained in the Clean Air Act, the Clean Water Act, and RCRA.

Pilot Projects

Authority to conduct or authorize "pilot projects" to assess the feasibility of expanding the coverage (and flexibility) of Beyond Compliance permits is conferred on the EPA Administrator. The legislation identifies several potential projects including, for example, the practicality of developing safeguards for inter pollutant trading. If a pilot project is successful, the Administrator is authorized to promulgate regulations which would modify the Beyond Compliance permit program to incorporate the improvements indicated by the project.

Funding

To pay for the implementation of a Beyond Compliance permit program, states are authorized to collect an annual permit fee which would include a surcharge of 10 percent. The fee would be based on the total of the fees for permits under the Clean Water Act, the Clean Air Act and RCRA. An alternative approach to funding is also available: a state may set permits fees at levels which will provide for reimbursement of the full cost of implementing the Beyond Compliance program.

Grants

A state with a Beyond Compliance permit program may use up to 25 percent of the grant money it receives under the Clean Water Act, the Clean Air Act and RCRA to implement its Beyond Compliance program.

1 Aggregate allowable emissions is the level of emissions allowed by the applicable environmental requirements for a facility operating at its actual rate of production. This level is lower than what would be allowed if the plant were continuously operating at permitted capacity

DRAFT

I-D.
D.2
ATT 2

3M Hutchinson's Participation in the MPCA Project XL

Beyond Compliance Project - 3M Hutchinson

Background: The objective of the Environmental Protection Agency's (EPA) recently announced "Project XL" program is to explore new ways to achieve superior and cost-effective environmental performance through regulatory flexibility. The Minnesota Pollution Control Agency (MPCA) intends to conduct several permitting demonstration projects in Minnesota under Project XL. This document describes 3M Hutchinson's cooperative effort with the MPCA under their proposal. The principal purpose of 3M's overall demonstration project is to explore ways to achieve environmental results well beyond those required by existing environmental regulations and, simultaneously, reduce the transactional costs and public and private resources associated with current regulations. Conducting this learning experience in Minnesota creates some unique and exciting opportunities. Minnesota was the first state in the nation to issue a "Flexible Permit". That permit was for 3M's St. Paul tape manufacturing facility. It allowed the greatest operational flexibility available under the existing regulations. Project XL presents the opportunity to release the full innovative potential of a team including stakeholders, MPCA, EPA and 3M.

The inclusion of this site in the MPCA Proposal is unique because 3M Hutchinson:

- proposes to simplify paperwork and the permitting of a large and complex site (two separate manufacturing operations are present) in an attainment area;
- will demonstrate a cost effective way to out-perform a strict new Maximum Achievable Control Technology standard;
- is in a rural area, and attainment for all pollutants; and
- will explore unique waste management alternatives.

Site Description: 3M Hutchinson is located in McLeod county in the city of Hutchinson, Minnesota, approximately 50 miles west of Minneapolis. The site actually consists of two separate manufacturing facilities: a magnetic products plant operated by the Consumer Audio and Video Products Division (A/V plant), and an adhesive tape products plant operated by the Tape Manufacturing Division (Tape Plant). Combined, the facilities employ approximately 2000 people. The A/V plant primarily manufacturers magnetic recording products video cassettes, etc. The tape plant manufactures pressure sensitive adhesive tape products for 22 other divisions within 3M.

Project Overview: 3M will work with local stakeholders, MPCA and Environmental Protection Agency (EPA) to create an agreement that:

- is multi-media, i.e. one that covers air, water and hazardous waste;
- is performance based, that is, it focuses on the overall outcome rather than specific technology requirements;
- provides for environmental improvement beyond current requirements;
- attempts to provide maximum flexibility within the site for making changes;
- emphasizes waste minimization and pollution prevention;
- results in cost savings and minimizes duplicative or unnecessary paperwork requirements and other transaction costs;
- explores unique waste management alternatives; and
- provides for enhanced public participation.

This agreement will serve as an alternative for the majority of existing requirements under the Clean Air Act and a limited number of provisions under the Clean Water Act and Subtitle C of the Resource Conservation and Recovery Act.

Creation of a Multi-media Permit: The site currently operates under several environmental permits governing air and water emissions and a license for its hazardous waste activities. The project envisions that all existing permits be consolidated into a single, multi-media permit.

Performance Based Air Emissions Limits: A key feature of the proposed agreement will be limits on air emissions plant-wide rather than by individual source. By providing flexibility in how the site meets the emissions goals, the site will be able to reduce its overall emissions well below applicable standards.

Unique Waste Management: The proposed agreement will also increase opportunities for recycling of solvent wastes at the site. The site will explore increasing the amount of solvent recycled on-site and reused, rather than being incinerated or recycled off-site.

Maximizing Operational Flexibility: This agreement would serve as an alternative to some existing regulatory programs. It would allow the site to make changes which perform within the authorized limits. The agreement would establish procedures for notifying the State as appropriate and the site will continue to operate beyond compliance with new laws or regulations.

Accountability - Emissions Tracking: To ensure the site is meeting the air emissions limits, it will operate a computerized system to track emissions. This system will rely on state-of-the-art techniques to measure and calculate emissions.

Pollution Prevention Focus: As part of 3M and 20 years of the Pollution Prevention Pays (3P) Program, this site operates under a pollution prevention plan. This plan is consistent with the Minnesota Pollution Prevention Act of 1990. Upon approval of this agreement, the site will re-configure its plan and explore new opportunities in pollution prevention, recycling, and waste minimization. The site will also track major changes in the amount of waste generated at the site.

Paperwork Reduction: Most reporting and record-keeping requirements will be simplified to provide all the necessary information to comply with the terms of its agreement. The site will pay assessed fees on a single, consolidated statement.

Applicable Requirements: The site must still comply with all other environmental applicable regulations that are not inconsistent with the agreement.

Stakeholder Participation: A Community Stakeholder Committee (CSC) has already been created. This committee would, among other things, review the proposed agreement to ensure it is understandable, review environmental reports and make recommendations on how the community would be best informed. Working with the CSC, the site will develop a means to keep the community informed. Internet will be investigated as a means of making appropriate environmental information available to the public. The site will work with the CSC and an auditor to create an auditing procedure for the site's Environmental Management System (EMS).

Beyond Compliance Project - 3M Hutchinson

Community Stakeholder Group

John Bernhagen	Minnesota Technology, Manufacturing Community Specialist
Dr. Carl Bretzke	Retired Medical Doctor
Dick Crawford	Hutchinson Leader, Editor
Randy DeVries	Hutchinson Water Treatment Plant Manager
Steve Dille	State Senator, Dassel
Bruce Eckhart	Hutchinson High School Environmental Studies Teacher
Larry Graf	KDUZ/KKJR Hutchinson, President
Dick Higgins	Hutchinson Technologies, Inc.-Environmental/Safety Manager
Brad Madden	Employee Representative - Maintenance Department
Pete Marsnik	Hutchinson Technologies, Inc.-Chemical Engineer
Vi Mayer	Hutchinson Chamber of Commerce
David Minge	U.S. Representative, Montevideo
Robert Ness	State Representative, Dassel
Sheldon Nies	McLeod County Commissioner
Roger Olson	3rd District American Legion Commander
Tony Onnen	State Representative, Cokato
Janiće Rannow	KARP FM Glencoe, News Director
Jeff Schmidt	Hutchinson Middle School Science Teacher
Marlin Torgerson	Mayor of Hutchinson
Bev Wangerin	McLeod County Commissioner
Dale Yukel	Employee Representative - Coater Trainer

Beyond Compliance Project - 3M Hutchinson

3M Team Members

Consumer A/V Plant

Doug Ward	Plant Manager
Steve Schwalbe	Safety/Environmental Manager
Brian Schoeberl	VHS Tape Product Manager
Paul Gerver	Professional Products Manager
Patti Kirchoff	Environmental Coordinator
Craig Henrikson	Solvent Recovery Unity Senior Engineer

Tape Products Plant

Joe Podolan	Plant Manager
Mike Bennett	Environmental Engineer

Hutchinson Site

Jim Ring	Human Resources Manager

Corporate

Gary Garner	Environmental Specialist
Dave Hallstrom	Division Engineering
John Herber	Division Engineering
Cheri Kedrowski	Advanced Environmental Engineer
Mike Nash	General Counsel
Rick Renner	Public Relations
Dave Wefering	Environmental Regulatory Specialist
Darril Wegscheid	Governmental Affairs

June 12, 1995

Mr. Charles Williams, Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155-4194

Dear Mr. Williams:

This letter is in support of the Minnesota Pollution Control Agency - Environmental Protection Agency initiative under "Project XL". We serve on a local "Stakeholders Committee" to review the progress of a pilot project at 3M Hutchinson to further reduce emissions.

We believe this project will benefit the environment, Hutchinson and Minnesota. We have been briefed on this project and believe this is an example of how government should work with private industry. It will make our 3M plant more competitive and keep our community prosperous.

Thank you for your leadership and help in this initiative.

Sincerely,

3M Hutchinson Stakeholder Committee Members

ATTACHMENT 4

KRPP
I-D
D.2
ATT

Assessing, Monitoring, and Evaluating a Minnesota Pollution Control Agency Pilot Project for Flexible, Multi-media Permitting

Professor Alfred A. Marcus
Strategic Management Research Center (SMRC)
Carlson School of Management, University of Minnesota

Dr. Donald A. Geffen
Fellow and Independent Consultant
Strategic Management Research Center Program
in Environment, Energy, and Safety

Professor Ken Sexton
School of Public Health, University of Minnesota

Dr. Brett A. Smith
Environmental Consultant and Conservation Chairperson, Minnesota chapter of the Sierra Club
and member of the National Sierra Club's Conservation Governance Committee

LJT cc: Tim Scherkenbach, HWD/MO
Roger Bjork, HWD/RCS
Ed Garvey, Director/Office of Environmental Assistance
Paul Hoff, ASD/EPRO
Rod Massey, AQD/PS
Andy Ronchack, AQD/PDAAS

ATTACHMENT 4

I-1
D.2
ATT

Advising, Monitoring, and Evaluating a Minnesota Pollution Control Agency Pilot Project for Flexible, Multi-media Permitting

Professor Alfred A. Marcus
Strategic Management Research Center (SMRC)
Carlson School of Management, University of Minnesota

Dr. Donald A. Geffen
Fellow and Independent Consultant
Strategic Management Research Center Program
in Environment, Energy, and Safety

Professor Ken Sexton
School of Public Health, University of Minnesota

Dr. Brett A. Smith
Environmental Consultant and Conservation Chairperson, Minnesota chapter of the Sierra Club
and member of the National Sierra Club's Conservation Governance Committee

LJT cc: Tim Scherkenbach, HWD/MO
Roger Bjork, HWD/RCS
Ed Garvey, Director/Office of Environmental Assistance
Paul Hoff, ASD/EPRO
Rod Massey, AQD/PS
Andy Ronchack, AQD/PDAAS

PROJECT NARRATIVE

1. Project Description

The initiative we propose to further in this project is granting companies flexible, multi-media permits in exchange for their moving beyond the terms of compliance in existing environmental regulations. The Minnesota Pollution Control Agency (MPCA) is planning to conduct 3 to 4 permitting pilots as an experiment to test the benefits of this approach. We have been asked by the Agency to participate in this program to advise in the shaping and implementation of the pilots, to monitor their progress, and to measure and analyze their outcomes. Specific facilities of three companies from widely different industries will be granted, through negotiations, multi-media permits designed to give plant managers the flexibility to achieve compliance goals in the most productive manner they chose. In addition to enhanced flexibility, this permitting approach promises to reduce transaction costs and diminish administrative burdens. In exchange for these benefits, the participating facilities must agree to reduce their emissions beyond that required by compliance by amounts that are deemed suitable for that industry.

Incentives for Innovative Pollution Prevention. We believe that this alternative approach to environmental regulation promises to provide the benefits of increased environmental protection at lower cost to society, creating a win-win situation for the environment and the economy. By offering plant engineers greater flexibility to meet compliance requirements and by freeing up resources through lowered transaction and administrative costs, we expect this flexible permit approach to lower considerable barriers to and to provide considerable incentives for innovative pollution prevention solutions. We also believe that this flexible permit approach will get the attention of top management within the participating companies. This will foster changes in the organizational "technology" of the company that will enhance the ability of operational staff to implement innovative approaches to reduce the environmental impacts of their manufacturing and at the same time increase its competitive position.

The Common Sense Initiative for the Iron and Steel Industry intends to follow the progress of this pilot very closely and have chosen this pilot project to be part of their work plan.

One of our roles in this experiment will be to encourage the MPCA and pilot companies to maximize the incentives for innovation in the permits negotiated. We will then observe how each facility goes about satisfying the requirements of its permit and measure the economic and environmental advantages of the new approach. We will determine the extent to which pollution prevention (P2) solutions are adopted at the test facilities and what changes if any should be made before expanding the program to other companies and industries. We will verify, as an independent, multi-stakeholder group, that compliance requirements have been met and determine the nature and extent of individual chemical emissions. We are particularly interested in examining the management and organizational responses to the flexible multi-media permits at both the corporate and plant levels. We will try to measure the cost savings enjoyed by the company that resulted from this regulatory approach and the potential cost savings to the MPCA. Finally, we will work in constant consultation with responsible officials from the air, water, and hazardous waste divisions of the MPCA and monitor the inter-media problems that develop during the pilot project.

3M and U.S. Filter have agreed to participate in the project and the MPCA has been talking with Cleveland Cliffs which is expected to be the third company in the pilot. 3M represents a chemically based high technology company with an enormous variety of products that is constantly changing. Relying heavily on developing new products, the company places a premium value on

getting its products to market rapidly and is in great need of the flexibility to make frequent changes at its manufacturing facilities in order to accomplish this. The experimental permit being considered for this pilot project provides the company with the flexibility it needs to compete. 3M has designated its manufacturing complex in Hutchinson, MN for the experiment. A single multi-media permit would cover both facilities at that site: a plant producing magnetic media and an adjoining unit producing adhesive tape products. The probable basis for negotiations will be the "Beyond Compliance" legislation being proposed by 3M for consideration by the Congress. Air emissions is the predominant outlet for pollutants at Hutchinson and the company is proposing to reduce aggregate emissions for each regulated chemical by 25% below that required under the Clean Air Act and associated federal regulations including the newly promulgated magnetic media MACT standard. 3M wants to keep emissions to all other media at or below compliance levels. In exchange, the company wishes to gain regulatory flexibility including optional ways to deal with PSD. Note that 3M will not only have the option to decide which production units at each plant should be targeted for the most reductions but to consider emission trade-offs between plants.

U.S. Filter's hazardous waste treatment facility in Roseville, MN. would be the second manufacturing site chosen for this pilot project. The Roseville plant receives waste from both foreign and domestic sources and has the capabilities, at the facility, for storage, treatment, recovery, and transfer of liquid, semisolid, and solid waste. The proposed pilot would expand the treatment and recycling of hazardous wastes that presently are not managed. U.S. Filter is also asking for flexibility in paperwork requirements that would enhance its capability to recycle back to its clients "etchant" materials that would otherwise require disposal. In this case permitting issues will focus on hazardous waste and water emissions and involve most heavily those divisions of the MPCA. U.S. Filter has, perhaps, more moderate but nevertheless important requirements for regulatory flexibility to respond to rapid changes in the advanced technologies with which it deals. In addition, the company has important supplier relationships with its customers, numbering in the hundreds. This feature will add another important element to the experiment as we examine the potential benefits of treating U.S. Filter and its customer as a single polluting unit and seeking the most cost effective way of reducing net harmful emissions from this production system.

Cleveland Cliffs, Inc., the most likely third company chosen for the pilot, will designate an iron ore treatment facility from among several it operates in Northern Minnesota. This example will provide a test of the benefits of flexibility and multi-media permitting for an industry producing a stable product with an, up-till-now, slowly changing technology. We expect that beyond compliance goals may be modest, in the short term at least. Changes in management and operations that make the company more open to incremental but continuos P2 improvements, induced by the flexible permit and the changed relationship between the manufacturer and regulator, may be the most important outcome of this particular pilot. If these regulatory changes, and others that may arise as a result of this experiment, lead to positive environmental benefits at this basic industry plant, it would indicate that their benefits are applicable to a broad range of industries indeed.

The Pollution Prevention (P2) Dialogue. Our role in and the impetus for this pilot project came out of a pollution prevention dialogue that we are conducting under the auspices of the Joyce Foundation. A collaboration consisting of the Strategic Management Research Center (SMRC) at the University of Minnesota, the Minnesota Environmental Initiative (MEI), and the Center for Global Change at the University of Maryland have brought together a multi-stakeholder dialogue group devoted to explore innovative and collaborative solutions to pollution prevention problems. Our specific focus has been to remove barriers to, and provide incentives for, pollution prevention by

businesses. The P2 Dialogue is composed of representatives from Minnesota corporations and small businesses, environmental consultants from law and engineering, the State Legislature, the Attorney General's Office, the MPCA, the Office of Environmental Assistance (OEA), the Environmental Quality Board (EQB), environmental advocacy groups, and academia. The full list of participants is provided in Appendix A. It is worth noting that some members of the Dialogue are also participants in the CSI and the Presidents Council for Sustainable Development, giving us liaison to these national efforts.

The idea for the pilot project was originated by three participants in our P2 Dialogue -- Lisa Thorvig, Air Division Manager for the MPCA, and Tom Zosel and Dave Wefring of 3M, and was stimulated by several dialogue meetings that examined the barriers and solutions to P2 arising from governmental regulation and the nature of Minnesota businesses. With support from the Joyce Foundation, the P2 Dialogue is continuing to meet and will play an important advisory role in the pilot project. Funding by the Joyce Foundation and contributions of time from faculty members at the University of Minnesota constitutes a substantial leveraging of funds across the partnering organizations.

2. Objectives

Principal Objectives:

1. To help make this experiment in flexible, multi-media environmental regulation as productive as possible in achieving the following goals:
    - maximize the incentives for pollution prevention.
    - make the pilots as broadly applicable to other industries as possible so that they can be reproduced and diffused.
2. To determine the degree and the extent of the benefits resulting from the pilot and track what takes place at each of the participating companies. Particular attention will be paid to:
    - estimate the extent to which pollution prevention solutions have been implemented.
    - determine how legal, regulatory, managerial, technical, and other barriers to pilot success have been overcome.
    - estimate the cost benefits enjoyed by the manufacturers as a result of the permitting process.
    - observe long term effects, that is whether pilot companies continue to make improvements once their beyond compliance goals are reached.
3. To work towards making the pilot project, if successful, a permanent option for as many companies and industries as possible, both in Minnesota and nationally. In order to accomplish this, we will:
    - provide the MPCA and participating companies with the project team's and the P2 Dialogue's diverse expertise as a resource.
    - be a litmus test for potential public opposition and supply remedies for valid objections.
    - garner support among interested stakeholders.
    - prepare reports and develop a speakers program from members of the P2 Dialogue.
    - submit an article for publication in a leading business journal.

Subordinate Objectives:

1. To develop an understanding and analysis of how management responds to the challenge of a changed regulatory structure and the opportunities presented by it.
2. To develop an understanding and analysis of how production engineers at the pilot facilities respond to the opportunities for technological innovation presented by the flexible permits.

Anticipated Obstacles to Our Achieving These Goals:

- Gaining sufficient access to data at the pilot project facilities when proprietary issues are involved.
- Conducting interviews of plant personnel without disrupting operations.
- Delays in permit negotiations caused by legal problems and disputes over existing federal legislation.
- Resistance within government agencies to changes in regulatory procedures.
- Reconciling differences in pollution measurement conventions in the various media.

3. Results or Benefits Expected

In discussing the benefits of this project we must distinguish between those coming from the MPCA Pilot Project itself and those coming from the principals participation in that project and for which funding is being requested. We shall primarily devote our discussion to the latter sum of benefits although a few comments first about the benefits of the pilot project itself must be made. The MPCA will proceed with this pilot whether or not the Principals and the P2 Dialogue participate. Valuable experience will be gained by the MPCA and the participating companies as to the advantages and drawbacks of an alternate, more flexible multi-media regulatory approach. They will learn whether or not we can attain environmental protection at lower cost and get some idea of how this was accomplished. Our conversations with several people at the MPCA indicate, however, that the agency does not possess the resources or expertise to fully assess, understand, and disseminate information about the results of their experiment. These officials argued that if the project is to lead to real positive change in the way we achieve our environmental goals, a more complete and informed analysis of the project by an independent multi-stakeholder group would be needed.

The benefits we expect to arise as a result of our efforts include the following:

Maximize incentives for pollution prevention (P2) in the permitting process.

The flexible permits envisioned by the MPCA have, in principle, built in several incentives for P2. However, the devil is in the details. The project principals and volunteers from the P2 Dialogue will participate in the permit negotiations to ensure that these incentives remain or are enhanced. We see as the main incentives offered by the pilot permits to be:

1. The price the pilot companies will have to pay for obtaining a flexible permit is to agree to reduce their facility's aggregate emissions by some percentage below the level permitted by law. Many plants are now operating with pollution controls such that the cost of reducing emissions further by employing end-of-pipe technologies increases rapidly, prohibitively so. P2 approaches therefore, when feasible, become economically attractive. In other words, "beyond compliance" requirements will stimulate more P2. We want to help the MPCA set these beyond compliance limits at levels that are reasonable for each industry and yet will still encourage P2.

2. The permits envisioned for the Pilot Project will only set limits on aggregate emissions to the air and water by the entire facility rather than requiring "best available control technology" for every production "unit" at the plant. This flexibility increases the options the manufacturer has for employing P2 solutions. The requirement that every unit at the plant meet emission standards often rules out innovative production process changes. Furthermore, since compliance in the experiment is to be assured by either instrumental monitoring or mass balance analyses, there is no need for using BACT end-of-pipe equipment to guarantee compliance. The notion that some part of a manufacturing facility may be "violating" emissions standards can easily give rise to public opposition, especially from environmental advocates or government officials and legislators. The principals, working with the P2 Dialogue, can raise public awareness to the benefits of this "violation" and gain the support of these stakeholder communities who are represented in the Dialogue.
3. The experimental permits will be multi-media and will give the manufacturer a more integrated understanding of the facility's environmental problems. This should discourage, in many cases, end-of-pipe remedies that merely shift the problem from one media to another and encourage P2 solutions which reduce emissions to all media.
4. By offering the opportunity of achieving environmental goals at lower cost, this pilot will get the attention of the pilot companies' top management team. If this alternate regulatory structure can change the role of the company's environmental managers and engineers from that of policeman to one of partners in production and operations, great long term environmental and economic benefits will accrue. The principals want to work to retain this benefit in the pilot and, by means of interviews, determine how successful this incentive has been to improve the relationship between top management and environmental management as well as between the latter and plant operators.

Help make the pilot as broadly applicable to other industries as possible.

The Dialogue has already exerted its influence to move the MPCA in this direction and it now looks as if at least three companies chosen for the Pilot will have quite different characteristics. Not all industries are capable of taking their manufacturing facilities as far below compliance as 3M is proposing to do. The MPCA recognizes this but the P2 Dialogue wants to ensure that reasonable flexibility will exist in setting beyond compliance targets for different industries. The Dialogue will play an important role in gaining public understanding and acceptance of this feature.

Assuming the pilot meets with success, the principals and members of the P2 Dialogue will see to it that its results get as broad a dissemination as possible and that momentum develops to include more and more companies and industries as participants in this alternate regulatory system.

Use the diverse expertise and experience of P2 Dialogue participants as a resource for the MPCA.

Our Dialogue has diverse multi-industry representation. The consultants participating have business clients that range from the Fortune 500 to medium and smaller companies. Another participant is both a small manufacturing firm owner and active in environmentally related public policy issues. We will use these valuable resources to help keep the flexible permitting experiment as broadly attractive and applicable as possible. The permits will require a long term plan for achieving beyond compliance goals. Many of the Dialogue participants are P2 experts and can influence the pilot companies into utilizing more P2 solutions.

Businesses need long term environmental goals, stability, and predictability of environmental regulations in order to plan and make investments to reduce pollution at the source. Our P2 Dialogue

can play an essential role in getting this point across more forcefully to regulatory agencies and other government institutions. We hope to make this flexible, multi-media regulatory alternative an important first step in achieving this goal.

Help garner support for the pilots among the stakeholders.

Most of the P2 Dialogue participants are influential members of their respective communities. Thus, the Dialogue affords the opportunity of maintaining continuing public acceptance and support for the pilots.

Provide an independent analysis and report on the outcomes of the experiment.

By participating in this process, the principals will examine the benefits of regulatory flexibility to the state, to the environment, and to the companies involved. We will determine what makes these experiments succeed (or fail), what makes them work well, and if they are successful, under what conditions they can be reproduced. We will report our results in written reports, seminars, conferences, and other settings. By disseminating the results in this way, we hope to diffuse they type pollution prevention regulating innovation we are following.

4. Approach

Work Plan

Our work plan naturally divides into three phases: the shaping phase of the project during which time the permits are designed through negotiations between the MPCA and the participating companies with the principals and P2 Dialogue playing an advisory role; the monitoring phase when the pilot project companies carry out the required modifications at the pilot facilities and the principals and volunteers from the P2 Dialogue monitor and study the changes and outcomes; and the analysis and dissemination phase when the principals analyze and report on their findings.

Before describing each phase of activity in more detail, let us outline the structure we have established to facilitate the role of the P2 Dialogue in support of the pilot project.

The Dialogue's Role in the Pilots.

The Pollution Prevention Dialogue has devoted time to discussing and fostering the MPCA beyond compliance pilot projects, and the MPCA has asked it to participate in the pilots in an advisory and consultative role. The MPCA chose the Dialogue not only because the Dialogue helped to foster the pilots but because the Dialogue has broad stakeholder representation with varied and considerable expertise and contains important decision makers in the community.

To carry out the advisory role, the Dialogue has formed a Pilot Project Committee (PPC) composed of members from each of the stakeholder groups:

Gary Weisbrod	Sr. Dir. Environmental Health & Safety, Deluxe Corporation
Brian Lim	Environmental Services Manager, H.B. Fuller Company
Jon Bloomberg	Attorney, Oppenheimer Wolff & Donnelly
Dennis Willis	VP Operations, Capsule Environmental Engineering
Lee Paddock	Director Environmental Policy, MN Attorney General's Office
Carol Wiessner	Staff Attorney, MN Center for Env. Advocacy

Lisa Doerr	Program Director, Citizens for a Better Environment
Lisa Thorvig	Division Manager, Air Quality Division, MPCA (Lisa Thorvig will both represent regulators on the committee and serve as liaison between the MPCA and the Pilot Project Committee.)

All the principals are participants of the P2 Dialogue as well. Brett Smith and Ken Sexton are members of the Dialogue itself and Don Geffen and Alfred Marcus have been organizing and facilitating the meetings.

The Dialogue will rely on the PPC to monitor and advise the MPCA about the pilots. The PPC will periodically consult with the Dialogue for feedback which it will relay back to the MPCA and participating companies. We have structured the process of accomplishing this in a way to make efficient use of the P2 Dialogue volunteers' time. At least one of the principals and volunteers from the PPC will participate in negotiating meetings during the shaping phase or in plant visits and interviews during the monitoring phase. We envision a voluntary rotating of responsibility by the PPC members. The attendees of each meeting or visit will then report on their observations to the entire PPC at periodically held meetings. The report itself will be written by the participating principals subject to approval by the other attendees. The PPC will then discuss the report and make recommendations and suggestions for improvements. The principals will then write a report and summary of these deliberations and submit several of these to the P2 Dialogue at meetings scheduled once every one or two months for this purpose. Final consensus recommendations of the Dialogue will then be taken by the principals back to the MPCA and pilot companies for their consideration.

Shaping phase.

The MPCA and each participating company will have a series of meetings in order to fashion the permit for each pilot project facility. One or two of the principals will either attend the meetings or, what is more likely and preferable, attend a special one hour briefing by the parties of the negotiations. Don Geffen, who is making the largest time commitment to this project, will attend a majority of these sessions. The principals will also work with the PPC of the P2 Dialogue to ensure its participation. In between these meetings, the principals will maintain contact with the individuals at the MPCA and pilot companies to both follow the course of the permitting process and to make suggestions for changes.

The major activities by the principals during this phase will include reporting and analyzing the ongoing negotiations, facilitating participation by the PPC and P2 Dialogue, and performing research to follow up on issues and ideas that develop. The diverse backgrounds and experience of the principals and the members of the PPC will provide a valuable resource for this process.

As can be seen in the accompanying resumes and budget, we are including on the team a Ph.D. graduate student from the Civil Engineering Department of the University of Minnesota, Marc von Keitz who plans to write his Ph.D. thesis on the engineering challenges and responses to the permit experiment. Mr. von Keitz hopes to work closely with plant engineers during the planning and operating phases of the pilot project. Marc will provide valuable advice during the shaping phase as to elements of the permit that can impede or enhance the engineering options available to the plant operators. In this respect we will also benefit from the presence of a consulting environmental engineer on the PPC.

Monitoring Phase: During this phase we intend to determine the degree and the extent of the benefits resulting from the pilot and track what takes place at each of the participating companies. To accomplish this the principals will:

1. seek access to operating data at the participating pilot facilities that will be used to determine their levels of emissions including any data from monitoring instruments,
2. carry out on-site visits to each facility and conduct interviews of production managers and workers including an analysis of the way management has organized the production process to compare it against a benchmark of best practices,
3. examine the extent to which P2 efforts were considered or applied to reduce emissions.

If the P2 Dialogue spins off a working group on innovations in activity based accounting, etc., we would combine both these efforts during this part of the Pilot Project.

Managerial and organizational issues will be examined by relying on interviews with plant managers and their associates and additional interviews, where appropriate, with central management including the VPs for plant production and environmental, health, and safety. We will also seek interviews with the participating companies' C.E.O.s to determine whether or not the changed regulatory environment has led to a changed attitude and relationship between top management and environmental managers and engineers. In doing so we will determine the answers to the following questions:

- How will they mobilize their environmental, engineering, and operational staff to work together to move beyond compliance and take advantage of the regulatory flexibility offered?
- What types of P2 project will they begin? Who will originate these projects. How will they be implemented?
- How will they quantify the outcomes and prove their efficacy and profitability?
- What type of management changes will be necessary to make the progress in pollution prevention? Will these changes be temporary or ad hoc in nature?
- What type of accounting and engineering systems will be used?

There are also important managerial issues at the MPCA. We will endeavor to monitor how the agency adapts to the challenge of multi-media permitting. What are the barriers, if any, to cooperation among the air, water, and hazardous waste divisions of the MPCA. What organizational changes do we recommend to better implement this second, more flexible track for environmental regulation? Our frequent meetings with MPCA officials from all three divisions will help us to monitor any intra-agency problems that should arise.

Engineering issues will be investigated by relying on in-plant interviews and visits. The Ph.D. thesis work of von Keitz will be very helpful in this regard. We will employ an environmental engineering consultant, with knowledge of each particular industry and production processes employed, to make on-site visits and analyze the engineering and production changes that have been made to satisfy the requirements of the permit. We are interested not only in the technological innovations that evolve but the organizational changes that take place in the production process. Our analysis will emphasize the extent to which P2 was employed as solution to the environmental problems at the plants.

We will also monitor the environmental outcomes of the permits. Has each facility met its emission requirements? Can we quantify the health and environmental benefits of the changes? Are there any adverse local neighborhood impacts due to the "bubble" approach for setting emission standards? The data required for this will come from the facilities own monitoring equipment or mass balance analysis. If necessary however, we would provide our own monitoring equipment to verify the pilot companies' data.

Analysis and dissemination phase.

Most of this phase of the project will take place during the second year although elements of both analysis and dissemination will occur throughout the two years of the project. We will review all our reports and monitoring data and the reports and analysis by the environmental engineering consultant. Elements of Marc von Keitz's thesis will also be used. Our focus will be on measuring the degree of success of the Pilot Project and how it can be improved. We will examine how adaptable it is to other industries, how much are costs reduced, and what the environmental and health benefits are.

We want to determine how legal, regulatory, managerial, technical, and other barriers to the pilot's success have been overcome. The initial barriers will be legal and regulatory. Beyond these legal and regulatory hurdles, there are a number of managerial and technical hurdles which will have to be overcome at the participating companies. We will document and track how these hurdles are handled and overcome. Short case studies will be proposed which can be disseminated via publication and conference presentation.

We will employ several ways to disseminate our analysis of the pilot project: directly through publication of articles, circulating reports, and making presentations at conferences, seminars, and meetings; and indirectly through the efforts of participants in the P2 Dialogue who will be a part of the project. The latter method of dissemination could be a particularly powerful way of accomplishing this because of the diversity and prestige of the group.

A final task of the project is actually beyond the scope of this current two year project. It is to observe the long term effects of the flexible permits. Do the pilot companies continue to improve environmental performance once their beyond compliance goals are reached? This objective will require periodic company visits and interviews over a number of years. Nevertheless, determining the long term benefits of the pilot project is an important aspect of the experiment and will be pursued by at least some of the participants if possible.

Facilities Available and Non-Federal Sources of Funds and Facilities to Carry Out the Project

The Strategic Management Center of the University of Minnesota Carlson School of Business will provide the managerial center for the project and some of the resources of the Center, predominantly some of Professor Marcus' time will be contributed to the project. The Universities School of Public Health and the Civil Engineering Department are two other university facilities whose resources will be applied to our work. Ken Sexton, Professor at the School of Public Health plans to contribute a good part of his time to the project and Marc von Keitz's thesis advisor, by advising Mr. von Keitz, will be making a contribution as well.

The P2 Dialogue, which is going to work with us in an advisory capacity, will be continuing during the pilot project and will be funded by a grant from the Joyce Foundation. Although some of its activities will be unrelated to the pilot project, there will be quite a bit of overlap, especially if it

We will also monitor the environmental outcomes of the permits. Has each facility met its emission requirements? Can we quantify the health and environmental benefits of the changes? Are there any adverse local neighborhood impacts due to the "bubble" approach for setting emission standards? The data required for this will come from the facilities own monitoring equipment or mass balance analysis. If necessary however, we would provide our own monitoring equipment to verify the pilot companies' data.

Analysis and dissemination phase.

Most of this phase of the project will take place during the second year although elements of both analysis and dissemination will occur throughout the two years of the project. We will review all our reports and monitoring data and the reports and analysis by the environmental engineering consultant. Elements of Marc von Keitz's thesis will also be used. Our focus will be on measuring the degree of success of the Pilot Project and how it can be improved. We will examine how adaptable it is to other industries, how much are costs reduced, and what the environmental and health benefits are.

We want to determine how legal, regulatory, managerial, technical, and other barriers to the pilot's success have been overcome. The initial barriers will be legal and regulatory. Beyond these legal and regulatory hurdles, there are a number of managerial and technical hurdles which will have to be overcome at the participating companies. We will document and track how these hurdles are handled and overcome. Short case studies will be proposed which can be disseminated via publication and conference presentation.

We will employ several ways to disseminate our analysis of the pilot project: directly through publication of articles, circulating reports, and making presentations at conferences, seminars, and meetings; and indirectly through the efforts of participants in the P2 Dialogue who will be a part of the project. The latter method of dissemination could be a particularly powerful way of accomplishing this because of the diversity and prestige of the group.

A final task of the project is actually beyond the scope of this current two year project. It is to observe the long term effects of the flexible permits. Do the pilot companies continue to improve environmental performance once their beyond compliance goals are reached? This objective will require periodic company visits and interviews over a number of years. Nevertheless, determining the long term benefits of the pilot project is an important aspect of the experiment and will be pursued by at least some of the participants if possible.

Facilities Available and Non-Federal Sources of Funds and Facilities to Carry Out the Project

The Strategic Management Center of the University of Minnesota Carlson School of Business will provide the managerial center for the project and some of the resources of the Center, predominantly some of Professor Marcus' time will be contributed to the project. The Universities School of Public Health and the Civil Engineering Department are two other university facilities whose resources will be applied to our work. Ken Sexton, Professor at the School of Public Health plans to contribute a good part of his time to the project and Marc von Keitz's thesis advisor, by advising Mr. von Keitz, will be making a contribution as well.

The P2 Dialogue, which is going to work with us in an advisory capacity, will be continuing during the pilot project and will be funded by a grant from the Joyce Foundation. Although some of its activities will be unrelated to the pilot project, there will be quite a bit of overlap, especially if it

We will also monitor the environmental outcomes of the permits. Has each facility met its emission requirements? Can we quantify the health and environmental benefits of the changes? Are there any adverse local neighborhood impacts due to the "bubble" approach for setting emission standards? The data required for this will come from the facilities own monitoring equipment or mass balance analysis. If necessary however, we would provide our own monitoring equipment to verify the pilot companies' data.

Analysis and dissemination phase.

Most of this phase of the project will take place during the second year although elements of both analysis and dissemination will occur throughout the two years of the project. We will review all our reports and monitoring data and the reports and analysis by the environmental engineering consultant. Elements of Marc von Keitz's thesis will also be used. Our focus will be on measuring the degree of success of the Pilot Project and how it can be improved. We will examine how adaptable it is to other industries, how much are costs reduced, and what the environmental and health benefits are.

We want to determine how legal, regulatory, managerial, technical, and other barriers to the pilot's success have been overcome. The initial barriers will be legal and regulatory. Beyond these legal and regulatory hurdles, there are a number of managerial and technical hurdles which will have to be overcome at the participating companies. We will document and track how these hurdles are handled and overcome. Short case studies will be proposed which can be disseminated via publication and conference presentation.

We will employ several ways to disseminate our analysis of the pilot project: directly through publication of articles, circulating reports, and making presentations at conferences, seminars, and meetings; and indirectly through the efforts of participants in the P2 Dialogue who will be a part of the project. The latter method of dissemination could be a particularly powerful way of accomplishing this because of the diversity and prestige of the group.

A final task of the project is actually beyond the scope of this current two year project. It is to observe the long term effects of the flexible permits. Do the pilot companies continue to improve environmental performance once their beyond compliance goals are reached? This objective will require periodic company visits and interviews over a number of years. Nevertheless, determining the long term benefits of the pilot project is an important aspect of the experiment and will be pursued by at least some of the participants if possible.

Facilities Available and Non-Federal Sources of Funds and Facilities to Carry Out the Project

The Strategic Management Center of the University of Minnesota Carlson School of Business will provide the managerial center for the project and some of the resources of the Center, predominantly some of Professor Marcus' time will be contributed to the project. The Universities School of Public Health and the Civil Engineering Department are two other university facilities whose resources will be applied to our work. Ken Sexton, Professor at the School of Public Health plans to contribute a good part of his time to the project and Marc von Keitz's thesis advisor, by advising Mr. von Keitz, will be making a contribution as well.

The P2 Dialogue, which is going to work with us in an advisory capacity, will be continuing during the pilot project and will be funded by a grant from the Joyce Foundation. Although some of its activities will be unrelated to the pilot project, there will be quite a bit of overlap, especially if it

develops other projects, such as a pilot project on activity based accounting, that can be tied in to our efforts.

Schedule of Accomplishments

June 1, 1995	• participating companies and plant sites selected
July to October, 1995	• permits are negotiated with the advice of the principals and the P2 Dialogue as an advisory group
October to December, 1995	• 30-60 day period of public comment on compliance documents advisory group supports permits if needed
July through December, 1995	• principals meet with permit negotiators; prepare reports for discussion at meetings of the PPC; prepare reports and recommendations for periodic meetings of the P2 Dialogue; meet with permit negotiators to consider recommendations of the P2 Dialogue; principals collect data determining baselines of plant operations prior to modifications
	• principals prepare report on process of overcoming regulatory barriers
January through December of 1996	• implementation phase for the pilot companies -- this time period is only an educated guess and may take longer for at least one of the facilities
	• principals and the PPC monitor the progress of the implementation; principals interview management and process engineers; Marc von Keitz works with engineers; principals and PPC make periodic progress reports to the P2 Dialogue
January through July, 1997	• beginning of operations of pilot project facilities; principals monitor operations, review data on emissions at each facility and verify accuracy if needed; continue interviews of management and plant engineers; Marc von Keitz assesses success of engineering changes; engineering consultant makes on-site visits and reports on outcomes; Geffen and Marcus determine reductions in operating expenses induced by regulatory changes; principals work with the PPC and P2 Dialogue providing them with progress reports and seeking feedback as to improvements in the regulatory process

March through July, 1997	• principals prepare analysis and reports of the pilot project's outcomes with assessment of benefits, disadvantages, and needed modifications, working with members of the PPC; analysis and conclusions presented to the P2 Dialogue for comments and suggestions; final report incorporates these inputs from PPC and P2 Dialogue
May through July, 1997	• dissemination phase begins -- principals prepare papers for publication, P2 Dialogue members make presentations to their respective stakeholder groups, etc.
June - July 1997	• P2 Dialogue, facilitated by the principals, write a final report for release to the public; designated spokespersons give media interviews to disseminate conclusions
1996 -- 1997	• principals and P2 Dialogue volunteers work with MPCA to find additional companies to join beyond compliance/regulatory flexibility program
July, 1997	• principals submit final report to EPA on what has been learned from this regulatory experiment and what changes, if any, are recommended

Project Participants Responsibilities

Professor Alfred Marcus is the Project Manager and will be responsible for the overall coordination of the project. Professor Marcus' primary focus in the project will be the management, organizational, and regulatory issues involved. He will conduct interviews of the pilot companies' top management and plant operating management and analyze them. Professor Marcus will help facilitate meetings with the Pilot Project Committee (PPC) and the P2 Dialogue and play a major role in the preparation and presentation of reports and papers about the project. Dr. Marcus will work closely with a Ph.D. student in the Carlson School of Management in carrying out his role. The project will be the basis for the Ph.D. student's dissertation.

Dr. Donald Geffen will work closely with Professor Marcus and with the other participants involved in the more technical aspects of the project. Dr. Geffen will conduct interviews of the pilot companies' top management and plant operating management and participate in their analysis. He will facilitate many of the meetings with the Pilot Project Committee (PPC) and the P2 Dialogue and play a major role in the preparation of reports and papers about the project. Geffen, applying hisscientific and technical background, will take responsibility for operating data collection and analysis. He will work with Ken Sexton and Marc von Keitz to see that their contribution is integrated into the total effort.

Professor Ken Sexton will help with the analysis of emissions data both to establish the facilities' base lines and to determine the benefits of the new permit. Professor Sexton will be interested in the health effects of the new approach to regulation and will provide that important aspect of our project both during the shaping and monitoring phases. He will assist in preparing reports and papers.

Dr. Brett Smith will participate as an advisor in the permit negotiations with particular emphasis on the incentives for pollution prevention that can be built into the permits. He will help track the implementation of P2 solutions at each facility and will provide analysis and reports of these efforts.

Dr. Smith will be of assistance in examining the economic benefits of the pilot and will play a role in the preparation of reports and papers.

Sharon Hansen is the Administrator for the Strategic Management Research Center. She will assist in our work with the P2 Dialogue by arranging for meetings and maintaining contacts with members. Ms. Hansen will assist in managing the data that will be collected for this project including base line plant operating data and post permit emissions and operating data.

Marc von Keitz will be conducting research towards obtaining his Ph.D. in Engineering at the University of Minnesota. He will work with plant engineers at the pilot facilities. Mr. von Keitz will study existing production technologies to develop a base line and follow the engineering and operational modifications that evolve in response to the flexible permit. He will work with Dr. Smith in analyzing the extent to which pollution prevention innovations are stimulated by the experimental permits and assist in preparing reports on their findings. Marc von Keitz's participation in the project provides us with a firm grounding in production engineering and important ties to engineering faculty at the university.

Environmental Engineering Consultant. We would like to hire an environmental engineering consultant from one of the Twin Cities leading consulting firms to provide us with an independent before and after analysis of the operations at each of the pilot facilities. Unfortunately since one of the pilot facilities is not yet determined and there may be an additional candidate added, we are unable to make a final commitment as to the best choice to perform this assessment. Consequently such services have not been put into the budget but we would like to have the option of coming back to you for additional funds to cover the cost of the consultant's services. Our estimate is that approximately $10,000 each year would be sufficient.

Data Collection Procedures

As noted throughout the Project Narrative, we will be collecting data about plant operations at each of the pilot project company sites and from corporate headquarters. We will review all the data presented to the MPCA for verification that these pilot plants are operating in compliance with the experimental permits. Mass balance analysis will play an important role in determining emission levels so that we will seek, if necessary additional production data to help understand and confirm the data reported to the MPCA. If we observe inconsistencies with any of the plant's operating data or monitoring equipment data we will work with plant engineers to resolve them. There is a small probability, as we now envision this project, that we will need to make independent measurements of emissions, using our own monitoring equipment. We have not now budgeted for such equipment but may have to request additional funds to do so for the second fund year.

We are also very much interested in measuring the changes in operating expenses, including compliance expenses, waste disposal and treatment expenses, insurance expenses, etc., as a result of the flexible multi-media permit replacing the older style set of single media, unit by unit permitting. We will obtain operating cost data from the participating companies and follow up with interviews of key operating personnel.

Data collection, therefore, should be relatively straightforward. Problems may arise involving proprietary issues but we expect to resolve these by signing confidentiality agreements and exercising some care on how this data is kept and reported. Inherent to measurements of operating costs at almost any manufacturing facility in the United States, present accounting methods do not easily lend themselves to the kind of facility by facility analysis we intend to pursue. Since we expect the pilot

project companies to be equally interested in this relatively new accounting approach, we do not regard this problem as insoluble.

5. General Project Information

The Nature of the Data To Be Collected

We have discussed the nature of the data we will be collecting in previous sections, most notably the last few paragraphs above. The reader is referred to these previous discussions.

Interrelationships of This Project With Other Programs

The grantees (Geffen and Marcus) are involved with several other programs which are enriched and will enrich in turn the project in question. One is a program of research (funded by the Management Institute for Environment and Business or MEB) examining the impact of environmental regulations on developing new technologies in the Metal Finishing and Electric Power industries. In addition to generating this flexible permitting pilot project, Geffen and Marcus will be continuing to work with the P2 Dialogue which is currently exploring the corporate barriers to pollution prevention and is seeking other pilot projects to promote changes within businesses to lower these barriers. One such project being considered would explore the feasibility of adopting some form of activity based accounting at the plant level to better account for the complete environmental costs of production. Should such a pilot materialize, it would provide an excellent opportunity to combine the two pilot projects to apply accounting innovations -- an important "technology" innovation, to the flex-permit pilot facilities. Funding for the P2 Dialogue is by the Joyce Foundation.

Professor Marcus has also been collaborating on a project, funded by the Great Lakes Protection Fund, examining innovation among small manufacturers that can lead to pollution prevention improvements. Special emphasis is on the metal finishing industry. Finally, the pilot project will provide Professor Marcus with valuable information that will enrich his teaching program at the Carlson School of Management.

Professor Sexton's research interests focus on human and ecological harm effects of toxic materials. His work and experience in this area will greatly enhance our program. His work on the pilot project will provide him with concrete "real life" examples that can provide valuable insights to his research program.

Dr. Smith is actively involved in pollution prevention activities and currently serves on the Office of Environmental Assistance's Pollution Prevention Task Force. He will be teaching a course in P2 at Hamline University in St. Paul. These ongoing programs will be of great use to the pilot project which, in turn, benefit from ties to the OEA to help maximize the P2 efforts in the project and from greater dissemination coming from these relationships.

APPENDIX A

Pollution Prevention Dialogue Participants

Business Community

Jill Curran	Facilities Administrator, Rivertown Trading Company	659-3796
Pam Graika	Director of Environment, NSP	330-5996
Vint Johnson*	Environmental Manager, Deluxe Corporation	483-7119
Steve Larson	Environmental Coordinator, Cargill, Inc.	742-7276
Brian Lim	Env. Services Manager, H.B. Fuller Company	481-4886
Sherry Munyon	Dir. of Env. Policy & Transp., MN Ch. of Commerce	292-4661
Paula Prahl	Honeywell, Inc.	951-3232
Anita Ryan	Owner, St. Paul Brass & Aluminum Foundry	698-2745
Richard Svanda	Director, Environmental Management, Josten's	830-3247
Gary Weisbrod	Sr. Dir. Env., Health & Safety, Deluxe Corporation	778-4361
Tom Zosel	Manager, Pollution Prevention, 3M	778-4805

Environmental Engineering and Legal Communities

Jon Bloomberg	Attorney, Oppenheimer Wolff & Donnelly	223-2500
Dan Bostrom*	Sr. Chemical Engineer, Barr Engineering	832-2796
Charles Dayton	Attorney, Leonard, Street & Deinard	335-1665
Mark Haveman	Program Director, WRITAR	379-5995
Bill Koch*	Attorney, Leonard, Street & Deinard	335-1500
Grant Merritt	Attorney, Merritt, Furber & Timmer	330-0960
Ross Ohman	President, Ohman Greacen Associates, Cons. Eng.	633-1318
Larry Sibik*	Manager, Process Development, Capsule Env. Eng.	636-2644
James Torgerson	Director of Environmental Consulting, RE/SPEC, Inc.	486-9771
Dennis Willis	VP Operations, Capsule Environmental Engineering	636-2644
Eric Yost	Chemist, Barr Engineering	832-2600

Government Communities

Barbara Freese*	Attorney, MN Attorney General's Office	297-8753
Don Frerichs	Asst. Minority Leader, MN House of Representatives	296-4378
Edward A. Garvey	Director, MN Office of Environmental Assistance	215-0228
Ann Glumac**	Deputy Commissioner, MPCA	296-7305
Joan Kersting*	Legislative Assistant, MN Senate	296-4167
Rod Massey*	Section Manager, Air Quality Division, MPCA	296-7512

---

* Alternates
** Ms. Glumac has resigned from her position as Deputy Commissioner.

Kevin McDonald	P2 Coordinator, MN Off. of Environmental Assistance	215-0242
Steven Morse	Chair Fin. Div., Env./Nat. Res. Cmte., MN Senate	296-5649
Kevin O'Donnell	Team Leader, Source Red., MN Off. of Env. Assist.	296-3417
Lee Paddock	Dir. Env. Policy, MN Attorney General's Office	296-6597
Lisa Thorvig	Division Manager, Air Quality Division, MPCA	296-7331
John Wells	Coordinator MN Sustain. Dev. Initiative, EQB	297-2377

Environmental Organizations Community

Lisa Doerr	Program Director, Citizens for a Better Environment	824-8637
David Fox Brenton*	Global Action Plan/Eco Teams, MN	824-7394
Carol Greenwood	Writer for Advisory Board, Seward Profile	724-8430
Ted Moores	Executive Director, Global Action Plan MN	824-7394
Brett Smith	Conservation Chair, MN Chapter of the Sierra Club	920-9569
Dick Werthy*	Seward Profile	
Carol Wiessner	Staff Attorney, MN Center for Env. Advocacy	223-5969

Academic Community

Ira Adelman**	Professor, Dept. of Fish & Wildlife, Univ. of MN	624-4228
Ian Greaves	Professor, School of Public Health, Univ. of MN	626-0900
Walter Maier	Professor, Dept. of Civil Eng., University of MN	625-3016
Ken Sexton	Professor, School of Public Health, Univ. of MN	626-4244
Marc Von Keitz	Dept. of Civil & Mineral Eng., University of MN	626-9536

Facilitators

Toby Dayton	Minnesota Environmental Initiative	334-3388
Don Geffen	SMRC, University of Minnesota	377-5704
Leslie Legg	SMRC, University of Minnesota	626-1050
Alfie Marcus	Professor, SMRC, University of Minnesota	624-2812
Sandra S. Smith	Smith Communications	473-7658