

# **Pollution Prevention Strategy for Michigan Agriculture**

**As Amended  
October 29, 1997**

## Contributors:

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**Memorandum of Endorsement  
of the  
Pollution Prevention Strategy for Michigan Agriculture  
As Amended October 29, 1997  
and  
Agriculture Pollution Prevention Implementation Plan**

Over a period of many months, with input from a variety of stakeholders, the Agricultural Industry developed a draft Pollution Prevention Strategy for Michigan Agriculture. This strategy was presented to the Director of the Michigan Department of Agriculture and the Director of the Michigan Department of Environmental Quality on March 14, 1997. The respective agencies convened to review the draft and initiate discussions with the Agricultural Industry Group. The **Amended Pollution Prevention Strategy for Michigan Agriculture** (Strategy) was finalized in October 1997 with concurrence from all involved parties. In response to the Strategy, the Michigan Department of Agriculture and Michigan Department of Environmental Quality have created the attached **Agricultural Pollution Prevention Implementation Plan** (Implementation Plan).

The goal, as stated in the Strategy, is to provide guidance to agricultural and environmental policy makers in identifying and implementing agricultural pollution prevention activities in Michigan. In addition to the goal statement, the Strategy is a comprehensive plan that identifies objectives and lists recommendations. The willingness of the Agricultural Industry to work together and partner with local, state, and federal levels of government clearly demonstrates the cooperation and commitment necessary to move the provisions of the Strategy forward.

The Agricultural Industry has assumed a proactive, leadership role in addressing the issue of agricultural pollution prevention and fully embraces the philosophy that pollutants should be reduced through a multi-media approach. The implementation of that approach is vital if Michigan is to sustain a growing and vibrant agricultural economy and continue to effectively protect the environment and human health.

The Michigan Department of Agriculture and Michigan Department of Environmental Quality are committed to working with the Agricultural Industry to address agricultural pollution prevention as consistent with the mission and goals of each department. With the signing of this document, we commit the Michigan Department of Environmental Quality and Michigan Department of Agriculture to embrace, implement, and actively promote the concept of agricultural pollution prevention. We further agree to pursue the implementation steps outlined in the November 10, 1997 Implementation Plan to the greatest extent possible within available resources.

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Dan Wyant, Director  
Michigan Department of Agriculture

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Russell J. Harding, Director  
Michigan Department of Environmental Quality

# **POLLUTION PREVENTION STRATEGY FOR MICHIGAN AGRICULTURE**

## **I. Introduction: The Charge**

On June 6, 1996, Director Russell Harding, Michigan Department of Environmental Quality (MDEQ) and Director Gordon Guyer, Michigan Department of Agriculture (MDA), issued a letter requesting the development of an industry led, **Pollution Prevention Strategy for Michigan Agriculture**. The directive centered on a 1990 report released by a producer driven Agricultural Nonpoint Source Task Force. The charge, as stated in the letter was to, *“move these (task force report) recommendations toward an implementation phase by utilizing them as a cornerstone for developing a Pollution Prevention Strategy for Michigan agriculture.”* The letter further stated that, *“The strategy will be made available to the legislature and state and local policy makers for use as a guide in developing agricultural-environmental policy.”*

In a series of meetings, an Agricultural Pollution Prevention Task Force core committee met to discuss the environmental issues confronting producers, agri-business, and agencies into the 21st century. On March 14, 1997, the Task Force presented a draft pollution prevention strategy to Director Dan Wyant, MDA, and Director Harding, MDEQ. The respective agencies convened to review the draft and initiate a dialog with the Task Force core group. The following strategy was finalized in October of 1997, with concurrence from all involved parties and an Implementation Plan was drafted by MDA and MDEQ to facilitate implementation of the Strategy recommendations.

## **II. Guidelines for Successful Implementation**

### **A. Focus on Impact**

An effective Pollution Prevention Strategy for Michigan Agriculture must emphasize, above all else, overall impact on both environmental quality (through pollution prevention) and agricultural financial viability. Ultimately, program outcomes should be evaluated on these criteria with due consideration given to nonagricultural pollution sources and contributors.

### **B. Right to Farm is a Successful Model**

Michigan’s Right to Farm Act provides a model for agricultural pollution prevention. That success can be attributed to:

- producer participation in the design.
- workable, easily implemented, practical steps.
- voluntary actions and positive incentives rather than mandatory regulation.
- The Task Force maintains that no one has a right to pollute; therefore, the Michigan Natural Resources and Environmental Protection Act (P.A. 401 of 1994) remains the basis for action against those who choose not to voluntarily address identified significant pollution problems.

### **C. Further Recommendations for Successful Implementation**

To achieve maximum participation, an effective pollution prevention strategy should also:

- recognize that achieving environmental goals may come at a cost to farmers, and maintaining profitability is a priority.
- recognize that all society benefits from improved environmental quality and therefore shares a responsibility in the financial costs of achieving it.
- acknowledge producers' existing voluntary pollution prevention efforts.
- endorse approaches that emphasize partnerships and voluntary educational efforts as opposed to “command and control” regulation.
- allow flexibility, recognizing that Michigan agriculture is diverse and conducted under enormously varying conditions across the state, with vastly different potentials for pollution and pollution prevention.
- recognize and enhance producers' innovative abilities to solve/prevent pollution problems.
- enable producers to understand and appreciate the benefits of this approach.
- to minimize adversarial relationships between regulators and producers, giving way to a more facilitated cooperation, requiring new understanding from both.

### **III. Five Key Components**

The 1990 recommendations for agricultural nonpoint source pollution prevention emphasized four key components for an effective approach to address agricultural pollution prevention:

- A. Building on programs that work.
- B. Coordinating nonpoint source pollution programs (pollution prevention).
- C. Maximizing participation through incentives.
- D. Targeting incentives: priority concerns, priority areas, and priority farms.

The task force reaffirms the centrality of these components and applauds the intent of the MDA and MDEQ to use them as a cornerstone for developing a pollution prevention strategy for Michigan agriculture. In the course of deliberations, a fifth industry driven component was added:

- E. Increasing public awareness.

### **IV. Right to Farm as the Main Vehicle for a New Strategy**

The Michigan Right to Farm Act was identified as an excellent foundation from which to build an improved nonpoint source pollution prevention program. Emphasizing the water quality benefits achieved by following the Generally Accepted Agricultural and Management Practices (GAAMPs) will provide an effective vehicle for implementing widespread pollution control measures. The Right to Farm GAAMPs should become a key coordinating mechanism for

pollution prevention efforts. Greater coordination and education will enhance effectiveness of the GAAMPs.

An industry led environmental assurance option needs to be explored as a means to augment the existing Right to Farm Program. Obtaining environmental assurance through a voluntary participatory educational program would confer special benefits to the farm operation such as:

- credits for restricted use pesticide recertification.
- comprehensive enhanced liability protection. Thus, it is recommended that discussions between MDEQ and MDA begin on appropriate liability protection for producers who follow GAAMPs. (Similar to the environmental and nuisance liability protection authorized under P.A. 401 parts 87 and 201, and the Michigan Right to Farm Act).
- low interest loans (e.g., qualify for the State Revolving Loan Fund nonpoint source low interest loans).
- tax rebates.
- recognition that following GAAMPs implies accountability and conformance with good faith efforts to meet existing regulations.

## **V. Recommendations Regarding Other Current Programs**

### **A. Section 319**

Section 319 of the Federal Clean Water Act (Nonpoint Source Program) has made major contributions to pollution control for surface waters. Its strengths lie in its involvement of people at the local level, the development of watershed plans, and the provision of technical and financial assistance. The task force held that much of this program's success rests on four key points: 1) voluntary participation, 2) based on an understanding that changing practices affect farm economics, 3) uses established delivery systems familiar to agriculture, such as soil conservation districts, and 4) supports technical and financial assistance. It recognizes that producers will be more likely to implement practices, plans, or management systems, if such changes are accompanied by net tangible benefits.

#### *Recommendations:*

1. *Incorporate a more rigorous statewide prioritization to maximize program benefits of the Pollution Prevention Program.*
2. *Encourage continued administration on a watershed basis.*
3. *Explore cost savings and increased administrative efficiency by coordinating with MDA programs.*
4. *Assure that Best Management Practices funded by Clean Water Act, Section 319 grants are be consistent with Right to Farm GAAMPs.*
0. *Continue Section 319 funding with programs implemented at the local level.*

## **B. Natural Resources and Environmental Protection Act**

The Michigan Natural Resources and Environmental Protection Code, P.A. 401 of 1994, as amended, protects the state's environmental quality and provides recourse against individuals who contribute to serious pollution problems. Through the MOU between MDA and MDEQ, producers are given an opportunity to achieve compliance, and enforcement orders are directed toward those unwilling to comply with voluntary corrective measures. The code also addresses procedures for dealing with environmental emergencies. The Agricultural Pollution Prevention Task Force acknowledges the code's value and views it as a necessary complement to voluntary programs and good stewardship.

### *Recommendations:*

1. *Assure regulatory approaches recognize the value of GAAMPs and provide producers with clear and consistent performance criteria.*
2. *Develop an educational component to inform producers about the procedures to follow in an environmental emergency.*

## **C. Soil Conservation District Act**

The Soil Conservation District Act (P.A. 401 of 1994, as amended, Part 93) has made major contributions to preventing both surface and groundwater pollution by enabling local producers to adopt voluntary programs focusing on such issues as erosion control and prevention, pesticide and fertilizer management, irrigation management, energy conservation, and others. Soil Conservation Districts currently provide leadership in more than half of Clean Water Act Section 319 watershed projects and in a majority of the Michigan groundwater and freshwater protection programs.

Conservation districts have worked together in partnership with the Natural Resources Conservation Service, Michigan Agricultural Experiment Station (MAES) Michigan State University-Extension, Michigan Department of Agriculture, and the Michigan Department of Environmental Quality. The reduction of NRCS resources is dramatically impacting the kind and amount of technical assistance available to local producers.

### *Recommendations:*

1. *Encourage conservation districts to more actively lead a newly invigorated coordinated pollution prevention effort.*
2. *Allocate resources on a coordinated, statewide, prioritized basis.*
3. *Seek consistent funding for conservation districts as an important delivery system for a statewide agricultural pollution prevention program.*

## **D. The Michigan Groundwater and Freshwater Protection Act**

The Michigan Groundwater and Freshwater Protection Act assists producers in developing groundwater protection plans and provides educational resources, technical assistance, and cost-sharing. This assistance includes groundwater stewardship practices and local stewardship teams which aid assessment and problem solving. An important provision of this act is, that by adhering to groundwater stewardship practices, the farmer gains liability protection from groundwater contamination. By following groundwater stewardship practices, the producer has access to technical assistance, funding, and reduced insurance premiums. Groundwater and freshwater protection programs are funded by producers through pesticide and fertilizer registration fees.

### *Recommendations:*

1. *Focus and coordinate the Groundwater program with Section 319 and other related programs.*
2. *Expand local stewardship teams beyond groundwater to all water quality and pollution prevention concerns.*
3. *Utilize groundwater stewardship teams for the local input required under the 1996 Farm Bill.*
4. *Strengthen local, producer-initiated stewardship teams, while retaining farm-based decision making.*
0. *Groundwater stewardship practices should be consistent with GAAMPs, and Section 319 program, Best Management Practices (BMPs).*
6. *Assure regulatory approaches recognize the value of GAAMPs and take into consideration ground and surface water stewardship programs.*
7. *Continue program funding via collecting pesticide and fertilizer registration fees.*
8. *Provide guidance to producers on how to effectively use self-audits to improve performance, and qualify for penalty immunity, under Michigan's audit law (i.e., Environmental Audit Privilege & Immunity Act, P.A. 401 of 1994, as amended, Part 148).*

## **E. Existing Delivery Systems**

Existing delivery systems provide Michigan farmers technical information and support through a number of organizations. These organizations include Michigan Agricultural Experiment Station (MAES) MSU Extension, USDA-Natural Resources Conservation Service, Soil Conservation Districts, Commodity Groups, the Michigan Department's of Agriculture, Environmental Quality and, Natural Resources, and the private sector. Each has contributed to improving Michigan agriculture and is critical to continued efforts in addressing agricultural pollution prevention.

It is recommended that existing delivery systems be better coordinated or redirected to accomplish the pollution prevention goal. A clear delineation of roles and responsibilities should be established, elucidating the three-way partnership between the producer groups and agri-business, the technical/educational organizations (NRCS, MAES, MSU-E, and conservation districts) and the state regulatory agencies (MDEQ, MDA). The producer groups and the technical/educational organizations are the intended delivery agents.

*Recommendations:*

1. *Coordinate efforts between and within public agencies and with the private sector for more effective programming.*
2. *Collaborate effectively to create a tailored and targeted information system that is adjusted to meet individual farm needs.*
3. *Add producer and agri-business groups to this effort for a more comprehensive educational effort on Right to Farm.*
4. *Provide consistency and eliminate overlap and conflicting requirements, laws, and messages.*
0. *Use each agency's expertise as a resource for local stewardship teams (i.e., MSU-E Emergency Management Assistance Teams).*
6. *Include those who have not been reached using existing delivery systems such as MSU-E, NRCS, and Soil Conservation Districts.*
7. *Encourage the private sector to continue to play an active role in contributing to agricultural pollution prevention efforts.*

**F. Voluntary Whole-Farm Planning**

Whole-farm planning uses science-based information to provide management options for on-farm decision making. It can provide producers with technical and financial assistance, as well as pollution prevention education programs. The Agricultural Pollution Prevention Task Force recognized it as a potentially important tool for future pollution prevention efforts because it links environmental indicators with economic and production data.

Whole-farm planning affords the opportunity for more detailed and tailor-made programs. The concept is recommended nationally by the pork industry. Also, the Farm\*A\*Syst program is designed to assist producers in evaluating areas of potential environmental risk and has increased voluntary use of pollution prevention practices. Efforts are currently underway to expand from a farmstead to a whole-farm basis.

A whole-farm plan inventories all natural resources and environmental indicators affecting farm operations. It links these indicators to economic and production information to facilitate farm level decision making while simultaneously addressing economic, resource, and/or environmental needs. Whole-farm planning may be included as a component of an environmental assurance program.

Thus, within the assurance program, a farmer can combine various GAAMPs, seek out innovative solutions, change rotations, adopt integrated pest or crop management programs, change irrigation practices, and/or change livestock practices as he or she sees fit. The plan can be refined with improved information, additional management skills, changing finances, or experience. Continual participation in a farmer led, approved whole-farm planning process may serve as a basis for a farmer being in “compliance” with the voluntary environmental assurance program.

*Recommendations:*

1. *Farm\*A\*Syst should be expanded from farmstead to a whole-farm basis, and along with other whole-farm planning methods, should be made available to a greater number of producers. Moreover, it should receive consistent funding as part of a statewide pollution prevention program.*
2. *As Michigan implements a targeted pollution prevention program, whole-farm planning efforts should be encouraged.*

## **VI. Incentives**

Appropriate voluntary approaches and significant incentives must be identified to encourage producers to invest in appropriate pollution prevention practices, plans, or management systems which may have a potential undue negative economic impact. Providing technical assistance, education, and cost-sharing should continue where appropriate. Creative incentives and enhanced educational programs have been shown to be more effective than “command and control” regulations.

The Agricultural Pollution Prevention Task Force’s position is that the regulatory agencies must recognize that compliance with GAAMPs represents a good faith effort to comply with environmental requirements, and take this into consideration in any regulatory or enforcement actions. (See MOU between Michigan Department of Agriculture and Michigan Department of Environmental Quality) Note: Some form of “liability protection” for producers who follow GAAMPs is a subject that warrants further review. The Agricultural Pollution Prevention Task Force urges the MDEQ and MDA to begin these discussions immediately. Recognizing varying situations across the state, a coordinated approach should be taken using available cost-share dollars and other incentive opportunities.

*Recommendations:*

1. *Producers following a consistent set of management practices (GAAMPs) should be considered as making a good faith effort to comply with environmental regulations.*
2. *Explore other creative incentives, such as tax rebates and low interest loans.*
3. *Continue technical assistance, education, and cost sharing programs, particularly if tailored to priority issues and farms and targeted toward specific producer needs.*

4. *Make farm-specific technical consultation available to help producers develop whole-farm management options which improve farm profitability and protect water quality.*
0. *Explore alternative funding mechanisms that would further support organizations such as MAES, MSU-E, USDA-NRCS, and expand federal cost share programs.*

## **VII. Targeting**

Given limited resources, achieving maximum agricultural pollution prevention will require setting priorities. The majority of Michigan producers do not significantly contribute to nonpoint source pollution. Therefore, public investments should be concentrated on those areas that will yield the greatest benefit. Prioritization criteria for agricultural pollution prevention should be developed under the leadership of the Michigan Agricultural Commission.

A targeted program should have research, education, and cost share components as part of a pollution prevention program, and not be construed as part of a punitive enforcement effort. Although assistance will be available to everyone, given limited resources, certain areas should be targeted for specific incentives and other benefits that will make major impacts in pollution prevention and control. The risk in not prioritizing is that resources will be spread so thinly there will be no observable effect. Without targeting programs on an as-needed basis (as opposed to simply when they are requested), funds will not be used to the best potential.

While all farmers should have incentives and opportunities to voluntarily participate in the above referenced environmental assurance program, technical and financial assistance should be targeted toward priority concerns, priority areas, and priority farms. Such targeting will require a statewide process that:

- articulates the statewide goals for soil and water quality as to priority concerns.
- identifies priority areas (e.g., watersheds) where the probable benefits per dollar spent are the greatest.
- within priority areas, identifies those farming practices that are the probable major contributors to environmental concerns.
- provides a concerted, coordinated effort tailored to the individual farm situation to overcome any barriers so that these farms can change their farming systems and reduce or prevent pollution.

The Agricultural Pollution Prevention Task Force recognizes that the information to do this targeting is not at present ideal and more policy relevant research is needed, but even crude targeting on the basis of current information will help to reduce costs and increase the effectiveness of pollution prevention programs.

### *Recommendations:*

1. *Voluntary pollution prevention resources should be targeted at priority concerns, areas, and farms.*

2. *Education and technical assistance should be tailored to meet farm-specific situations within priority areas.*

### **VIII. Program Coordination**

Increased coordination is the critical factor to maximize the impact of available resources and efforts involved in agricultural pollution prevention in Michigan. Given the cooperation that exists in all sectors of Michigan agriculture, there is an opportunity to develop a more coordinated statewide approach which will have greater impact than is currently being achieved.

#### *Recommendations:*

1. *Development of a coordinated statewide approach for addressing agricultural pollution prevention should be directed by MDA and MDEQ. The approach should include 1) developing criteria for identifying priority concerns and establishing priority areas that have potential for the greatest water quality improvement, 2) partnering with educational institutions such as MSU to develop a research and education agenda for agricultural pollution prevention, and 3) establishing priorities for allocating resources for addressing agricultural pollution prevention efforts.*
2. *The MDA and MDEQ should seek additional input from Michigan State University, the USDA-Natural Resources Conservation Service, and others. Agricultural producers and agri-business should be well-represented in any such advisory endeavors.*
3. *Partner with private/public sectors in putting some models on the ground. These could become a resource for learning, as well as teaching, as we move forward.*