

## ENVIRONMENTAL POLICY BACKGROUND

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### ANIMAL AGRICULTURE

Animal agriculture, including livestock and dairy production and other feed and food processing, is a critical part of Minnesota's economy – \$5.2 billion in 2003. The full economic impact of Minnesota's livestock production is greater than \$10.7 billion when factoring in indirect and induced output. The livestock production sector is also a major employer in the state, supporting nearly 100,000 jobs. Some of these jobs are in economically stressed rural areas, though 75 percent are nonfarm jobs, some of which are important high-paying jobs in suburban and urban areas.

For this critical part of the state's economy to remain strong, agribusinesses and food processors, as well as livestock and dairy producers, and other supply chain partners and small businesses, must remain competitive.

In December 1999, the Minnesota Pollution Control Agency (MPCA) published proposed amendments to the feedlot permitting rule. This controversial rule was reviewed by the Legislature in the 2000 session and modified in a bill signed by Governor Jesse Ventura (Chapter 435, and also known as the 7020 rules). The law removes certain feedlots with fewer than 300 animal units from regulation. The MPCA also is required to respond to permit applications within 60 days.

In 2003, the Legislature amended the current statutory process for determining if an Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS) is needed for feedlot operations by stipulating that the environmental review will not be required for new animal feedlots with a capacity of fewer than 1,000 animal units. Expansions that are under 1,000 animal units are also exempt. The permit application for feedlots under 1,000 animal units must include a written commitment to design, construct and operate the facility in compliance with existing Minnesota feedlot rules and a public meeting must be held at least 10 days prior to the permit being issued.

In 2003, Governor Tim Pawlenty convened a Livestock Advisory Task Force to evaluate the status of Minnesota's animal agriculture industry and make recommendations to support its retention and growth in Minnesota.

The task force made the following recommendations: 1) Improve the use of local management in the siting of livestock operations, and convene a subgroup to identify barriers and solutions within county and township land-use planning and zoning for feedlot expansions and siting; 2) Improve the consistency, scientific basis, predictability, timeliness and efficiency of the state's permitting and environmental review process for livestock operations; 3) Encourage and enhance investment opportunities in Minnesota's livestock industry through tax credits and other financial incentives assisting livestock operations; 4) Prioritize resources and increase funding for research and education projects assisting animal agriculture, including through the University of Minnesota; 5) Preserve the investment in existing livestock facilities by supporting legislation that strengthens Minnesota's Right to Farm law and supporting educational programs for rural communities.

In 2004, the Legislature amended Minnesota's Right to Farm law strengthening the state's nuisance protection for feedlots by clarifying that certain farm operations are not subject to lawsuits for nuisances. A definition of "generally accepted agricultural practices" was included to help farmers defend themselves in a nuisance suit. The legislation also stated that after two years, a farm operating within generally accepted agricultural practices would not be a nuisance as a matter of law.

In 2005, the Legislature adopted some recommendations of the subgroup of the Livestock Advisory task force that was charged with making proposals concerning the local siting of feedlots. Recommendations included \$100,000 for training and technical assistance to county and town officials for livestock siting issues, local zoning and land-use planning and a livestock equipment loan program to provide loans to finance purchases of livestock-related equipment and livestock facility improvements. Also approved by

the Legislature was \$220,000 to the University of Minnesota for research and development of livestock odor and air quality management technology. Finally, local governmental units that are proposing to adopt a new feedlot ordinance, or amend an existing one, must notify the agriculture and MPCA commissioners at the beginning of the process and also must prepare a report on the economic effects of the proposed changes.

## **BIOTECHNOLOGY**

In the past, members of the Legislature have introduced bills that would prohibit or restrict the use of biotechnology-enhanced products for use in the state. Biotechnology provides farmers and food-makers with new tools for creating better, healthier foods from plants that are resistant to pests and more tolerant of environmental stresses like drought. It also accomplishes in a controlled and innovative way what traditional agriculture has attempted to do for centuries: Use renewable resources to feed more people efficiently, develop more nutritious foods, and create new food applications that improve the quality of life. Biotechnology is one of the most extensively researched and scientifically scrutinized agricultural developments. The federal government has a well-coordinated system to ensure that biotechnology-enhanced products are safe for animal and human health and the environment:

- The U.S. Department of Agriculture Animal and Plant Health Inspection Service are responsible for protecting agriculture against pests and diseases. The agency regulates the field testing of biotechnology-enhanced plants and certain microorganisms. It also approves and licenses veterinary biological substances, including animal vaccines that may be the product of biotechnology. USDA's Food Safety and Inspection Service ensures the safety of meat and poultry consumed as food.
- The Department of Health and Human Service's Food and Drug Administration (FDA) governs the safety and labeling of drugs and the nation's food and feed supply, excluding meat and poultry. The FDA ensures that foods derived from new plant varieties are safe to eat, holding them to the same high standard of safety as traditional food products.
- The U.S. Environmental Protection Agency ensures the environmental safety and safe use of pesticides and herbicides and certain industrial uses of microbes.

This three-part system ensures that biotechnology-enhanced products undergo years of laboratory and field testing before they can be marketed. In addition, the FDA requires labeling if a biotechnology-enhanced product is substantively different from conventionally bred grains or oilseeds or if it has health implications. If it is the same nutritionally and functionally as a conventional product, no label is required.

## **CLIMATE CHANGE**

Climate change science and investigation of prospective climate change environmental and economic impacts at the regional, national and international levels is a "work in progress." Combustion of fossil fuels is recognized as the primary source of man's greenhouse gas emissions. Various mandatory climate change proposals have been offered as risk hedging mechanisms in anticipation of prospective climate change impacts. These mandatory proposals include carbon or energy taxes that serve to increase the cost of fossil fuels and the controversial Kyoto Protocol, which would attempt to cap ratifying nation greenhouse gas emissions at various targets compared to 1990 emission levels, effectively curtailing combustion of fossil fuels. However, the relationship between increased energy use and economic growth is well established. The Minnesota Chamber has consequently opposed the imposition of a carbon tax since 1997. In turn, the Clinton Administration rejected carbon taxes as a means to address the climate change issue due to the large negative impact on the national economy. In 2001, the Bush Administration rejected the Kyoto Protocol, citing the need for further research to determine alternate climate change measures that are both warranted by climate science and compatible with sound U.S. economic policy.

The United States continues to implement various voluntary programs in accordance with the U.S. Climate Change Action Plan established after the U.S. Senate ratified the 1992 Framework Convention on Climate Change (Rio Accords). The president implemented the Climate Leaders and Business Partners program that calls upon U.S. companies to voluntarily make commitments that will help reduce the carbon intensity of the U.S. economy as measured by the tons of carbon dioxide equivalent greenhouse gas emissions per million dollars of gross domestic product.

In 2007, the Minnesota Chamber participated in the development and passage of the Next Generation Energy Act, making Minnesota a leader among states that are developing climate change strategies. The Chamber and businesses from around the state, as well as a variety of other stakeholders, are members of the Climate Change Advisory Group, appointed by Governor Pawlenty under 2007 legislation to develop a state Climate Change Action Plan. The Chamber will review the analysis and impact of the recommended options on Chamber members, economic sectors and the general business climate.

## **FOREST MANAGEMENT**

Forests cover one-third of Minnesota's land – 17 million acres – and provide the lumber and fiber needed to make the wood and paper products our society demands. Our forests also provide habitat for game and nongame species and numerous recreational and aesthetic benefits. The policies adopted and promoted by the Minnesota Legislature have significant impact on public and private forest lands.

At present, about one-half of the wood that grows each year in Minnesota is harvested. Harvesting occurs on less than 1 percent of the total forest land each year. Minnesota has been a leader in developing and promoting voluntary timber harvesting practices. These policies, embodied in the landmark 1995 Sustainable Forest Resources Act, have been widely implemented and recently withstood a legal challenge in the Minnesota Supreme Court.

The DNR Division of Forestry manages state-owned forests. Profits from timber sales (approximately 25 percent of revenues from the program) are deposited in the Permanent School Trust Fund and the general fund, depending on the type of land. The Division of Forestry timber program, while profitable for the state, has not received the level of funding needed to fully manage state lands and implement planned harvest levels in order to generate revenue for the state.

The University of Minnesota is recognized as having the best forestry program in the United States. This program is vitally important for the sustainability of our forest economy. The forestry, forest products and wildlife graduate programs and research of the University support the sustainable management and product development that makes Minnesota a leader in this sector of our economy.

## **PRODUCT STEWARDSHIP**

As the concepts of sustainability and stewardship have evolved in recent years, there is a greater focus on the "lifecycle" of products rather than just the problem of disposing of the product at the end of life. Waste and pollution prevention assessment techniques have become standard procedures in the development and manufacture of products by many companies. Eliminating unnecessary materials only improves the bottom line. Thus, the slogan of the Minnesota Chamber's Waste Wise program: "Less waste is smart business for a better environment."

As these concepts develop, there is debate about the focus and the role of the various parties involved in the lifecycle of a product. At this time, there is no international or national consensus. Those who use terms like "manufacturer responsibility" or "extended producer responsibility" want manufacturers of products to take specific responsibility for the product at the end of the product's life (meaning product take-back or paying for the disposal systems). "Shared responsibility," "shared product responsibility" and "extended product responsibility" are terms used by those who emphasize the role of each party in the lifecycle of a product from its development, design, manufacture, sale, distribution, use and disposal.

In 1999, the Office of Environmental Assistance (OEA) developed legislation to establish a state policy promoting “product stewardship” that, if implemented, could require manufacturers to be responsible for product disposal or recycling systems and to ensure that government does not pay the cost of these systems. The legislation directed the OEA to establish a list of “priority products.” The criteria for listing were so broad that any product could be a priority product. Manufacturers of priority products would be required to develop a plan to manage the product at the end of the lifecycle, or, in the alternative, provide funding for disposal.

The regulatory approach of the 1999 legislation has not become law. In 2000, the OEA shifted its approach and began a dialogue with several industrial sectors (electronics, paint, carpet) on voluntary product stewardship objectives. This approach is consistent with the Minnesota Chamber’s position. In addition, business trade associations have had ongoing dialogue on product stewardship concepts and have developed model processes that association members can use in the product development and manufacturing process.

In 2003, the Legislature banned cathode ray tubes (TVs, computer monitors) from landfills. Bills on electronic products were debated in the 2004 session but did not pass. Following the 2004 session, the OEA convened a stakeholder group to review options for the 2005 session.

The 2005 Legislature did not pass any legislation concerning the disposal of electronic products. The ban on the landfilling of cathode ray tubes was extended until 2006.

The ban on the landfilling of cathode ray tubes became effective July 1, 2006. In the 2006 session, the Legislature again could not agree on legislation on the disposal of electronic waste.

In 2007, the Legislature finally agreed on a program to dispose of electronic waste. The new law will require the collection and recycling of video display devices sold to households/consumers, including televisions, computer monitors and laptop computers. Manufacturers of video display devices must register and pay a fee to the state, and collect and recycle a percentage of the devices they sell in Minnesota – 60 percent of the total weight for the first year ending June 30, 2008.

## **REGULATION OF ANIMAL ANTIBIOTIC USE**

The U.S. Food and Drug Administration has approved the use of antibiotics in animals for 50 years. Approvals are given for four uses: disease treatment, disease control, disease prevention and health maintenance. Health maintenance, sometimes called growth promotion, is measured by average daily weight gain or feed conversion efficiency. The first three uses – disease treatment, control and prevention – are considered therapeutic uses and comprise more than 80 percent of the total antibiotic use in animals. And, thanks to the Europeans, we know that when this use is withdrawn, animals get sick. In Denmark, for example, the withdrawal of the use of antibiotics as growth promoters has sparked a 90-percent increase in the use of antibiotics to treat animal disease.

Antibiotic use in animals has been raised as a public health concern due to the possibility of antibiotic resistant bacteria transferring from animals to humans via the food supply, so it is useful to examine both the risks and the benefits of these tools.

**Risks:** Some people confuse the issue of antibiotic residues with antibiotic resistance. Residues in food are generally not a concern because they are tightly controlled and regulated.

While antibiotic resistant bacteria can transfer from animals to humans, data indicate that the protective management measures in place are working to prevent it from actually happening. Government data show that as bacteria levels on meat decline, food-borne illness is declining in the United States, and the rate of antibiotic-resistant, food-borne pathogens in humans is declining. All these improvements decrease the opportunity for antibiotic resistant bacteria to transfer from animals to humans.

## Benefits

- **Fewer disease outbreaks:** The judicious use of antibiotics allows veterinarians, livestock and poultry producers to address disease occurrence in a herd or flock before it becomes widespread.
- **Healthier growth:** Antimicrobials sometimes are fed in small doses based on evidence that they helped increase growth in young animals by as much as 8 percent. There is growing evidence that this use of antibiotics effectively suppresses disease outbreaks in animals.
- **Economic food:** Antibiotics, when used for health maintenance, decrease the amount of feed needed, increase the rate of weight gain and improve feed efficiency. This contributes to a high-quality, more affordable meat supply.
- **Safe food:** Evidence shows that the use of antibiotics decreases the chance for contamination by intestinal breaking and carcass contamination during processing.
- **Protection of resources:** Antibiotics allow farmers to use less land and water to achieve current production levels of meat and poultry, thus protecting precious resources.

## TOXICS IN THE ENVIRONMENT

Scientists, government and the private sector are working to refine our understanding of how natural and man-made substances act in the body and to investigate claims regarding potential adverse impacts on humans and wildlife. Government must ensure that any environmental standards are based on data that has met the rigorous standards of acceptance applied by the scientific community. In addition, consistent, scientifically accepted criteria and procedures must be used to assess and evaluate risks to human health in any specific situation.

It's unfortunate, but as environmental health risk programs have developed, there has been a lack of consistent policies. In the past, a permit review by the Minnesota Pollution Control Agency (MPCA) may have used different risk procedures and criteria than another review depending on the staff involved and the timing of the review. The confusion and inconsistency in selecting the appropriate health risk values to be applied to a particular review often has resulted in unfair treatment and greater costs for the permittee.

The Minnesota Chamber has worked with the MPCA, the Minnesota Department of Health (MDH) and other stakeholders in an ongoing process to review issues related to environmental health risk regulations. The Chamber's primary objective is to establish reasonable environmental health policies and programs based on sound science.

## WASTE MANAGEMENT

Minnesota has come a long way in management of solid waste since passage of the Waste Management Act in 1980 and the Comprehensive Waste Reduction and Recycling Act in 1989. In 1989, the Minnesota recycling rate was 9 percent. Today, Minnesota recycles about 46.5 percent of mix municipal solid waste, one of the top five states in the nation. In addition, the state developed more capacity to process waste and recover energy than any other state.

Many stakeholders and policy-makers are asking: How can we improve the system? Can the recycling rate be increased? At what cost? Is it economically viable to develop new processing capacity? In 2002-2003, the Office of Environmental Assistance (OEA) facilitated a group of government, business and environmentalist stakeholders in examining these questions (Solid Waste Advisory Committee). This

followed a 2000 report in which the OEA recommended that no unprocessed waste should be put in landfills by the year 2006.

As Minnesota Chamber members participated in these reviews, we have developed principles by which we will judge specific legislative recommendations. First and foremost, the Chamber supports integrated waste management that protects the environment. This means a balanced approach that maximizes recycling, accommodates processing facilities and uses landfills that comply with state and federal environmental standards. At the same time, the economics of management options must be assessed. It is also imperative that the waste management system relies on the private sector to own and operate facilities and the transportation and hauling infrastructure that makes the system work. The private sector has invested millions on dollars in trucks, and the latest technology for the processing and recycling of waste.

The 3Rs - Reduce, Reuse, Recycle - are the centerpiece of resource conservation. The Chamber policy supports maximizing the 3Rs, but recognizes that economics is an increasingly critical factor as incremental improvements become more difficult. Methods used to achieve resource conservation must be sustainable in the long term. The Chamber believes that competitive markets will promote new technology and management methods that will maximize the 3Rs at costs that are sustainable in the long term.

The Minnesota Chamber policy supports a review and streamlining of state government planning requirements that do not focus on maximizing the 3Rs. The requirements imposed in the laws passed in the 1980s may not be appropriate for the waste management system of today.

## **WATER PROTECTION**

The federal Clean Water Act of 1972 established a national program to meet water quality standards in our nation's lakes and streams. Implementation is delegated to the states by the Environmental Protection Agency (EPA). In Minnesota, the program is implemented by the Minnesota Pollution Control Agency (MPCA). For the past 30 years, the focus of the program has been on "point" sources, principally industrial facilities and municipal wastewater treatment plants where there is an end-of-pipe discharge. Permits for these facilities establish effluent limitations and technology requirements. If permit standards are violated, the facility is subject to enforcement action.

Despite significant progress in controlling point source discharges, state water quality monitoring data indicate that many of Minnesota's lakes and streams still do not meet water quality standards. The MPCA estimates that point source discharges contribute only 14 percent of the total water pollution. The remaining 86 percent is attributed to "nonpoint sources." This pollution does not come from the end of a pipe, but rather from a wide range of human and societal practices such as urban and agricultural runoff from land into our lakes and streams.

Section 303(d) of the Clean Water Act requires that the states identify and list stream segments and lakes that are determined through monitoring data to be "impaired"; that is, the ambient water quality standards are not being met. The "listed" waters are subject to a lengthy review to determine actions required to achieve the water quality standard. This is commonly called the Total Maximum Daily Load (TMDL) process. A study of the water body is conducted to determine the point and nonpoint sources of pollution that are causing the impairment. The analysis determines the maximum daily load of that pollutant that may enter the water body and still allow compliance with the ambient standard.

The law has potentially serious consequences for business and economic development. Under the federal law, no new or increased discharge is allowed into an impaired water body unless a plan is in place to meet the water quality standard and progress is being made to achieve that goal. This could prevent the expansion of an existing business or limit new development.

The MPCA has evaluated only 18 percent of the lakes and 14 percent of the streams in Minnesota to determine impairment. Approximately 40 percent of the waters evaluated have been found to be

impaired. To date, the MPCA has officially listed more than 1,400 lakes and stream segments. The federal law requires that TMDL studies and restoration plans be adopted within 13 years of the initial listing.

In developing a TMDL and restoration plan, the MPCA works closely with counties, cities, watershed districts, soil and water conservation districts, lake associations and other water planning and management organizations as well as businesses, agricultural organizations and citizen groups. In many cases, local governments take the lead role in the study.

In its March 2003 report to the Legislature, Minnesota's Impaired Waters, the MPCA estimated that the cost to restore the waters currently on the list to range from \$600 million to \$3 billion. This staggering number addresses only the 40 percent of the state waters that have been assessed. Due to the significant impact on business and economic development, the Minnesota Chamber has taken an active role in assessing the impact of the program and advising the MPCA on implementation.

In 2003, MPCA Commissioner Sheryl Corrigan assessed Minnesota's environmental issues and programs and determined that impaired waters are the top environmental priority of the Pawlenty Administration. In June 2003, Governor Tim Pawlenty spoke at a conference in St. Cloud attended by more than 300 people. In July, Commissioner Corrigan established a stakeholders process facilitated by the Minnesota Environmental Initiative in response to the 2003 appropriations bill which required that the MPCA report to the Legislature by February 1, 2004, on "discussions with stakeholders on strategies to implement the impaired waters program and any specific recommendations on funding options to address the needs documented in the agency's report to the Legislature."

The stakeholder group consisted of representatives of the Chamber, cities, counties, agricultural organizations, watershed districts, soil and water conservation districts, environmental organizations and other state agencies. This Group of 16 (G16) had input from an even broader Group of 40. The stakeholder group evaluated the program, developed goals and priorities for implementation, and considered options for funding.

The Clean Water Initiative funding proposal was not supported by the governor in the 2004 session. Clean Water funding was included in other proposals that were debated in 2004, but no legislation passed. The governor requested that the G16 review funding options for 2005.

The funding proposal for the 2005 legislative session was a fee of \$36 per household, \$36 per septic system and sliding scale of \$120 to \$600 for businesses. The proposal did not pass the Legislature.

In 2006, the Legislature passed the Clean Water Legacy Act which creates a framework for implementation of the federally mandated impaired waters program. The new law requires coordination and cooperation among state agencies and local units of government, sets goals and priorities for assessing, evaluating and restoring impaired waters and establishes a mechanism for ongoing oversight of the program. The Legislature also provided one-time funding of \$25 million from the general fund, environmental trust fund and bonding to begin implementation of the act, but failed to agree on long-term funding.

During the 2007 legislative session, the Legislature appropriated \$54 million from existing revenue to fund the program for the 2008-2009 biennium, but failed to agree on a long-term revenue source. The Chamber supports funding for the program from the general fund or the environmental trust fund and bonding. Appropriations from the general fund must be from existing revenue, not a tax increase.

## **MERCURY**

The Minnesota Chamber and other stakeholders have been working with the Minnesota Pollution Control Agency (MPCA) since the late 1990s to address the problem of mercury deposition in Minnesota. The Mercury Reduction Initiative resulted in recommendations in 1998 for legislation to establish goals for mercury reduction (60 percent by 2001 and 70 percent by 2005 from 1990 levels) as well as a program to

seek voluntary agreements to reduce mercury emissions. The Chamber supported the legislation that became law in 1999 (Minnesota Statutes section 116.915).

In the January 2002 report to the Legislature, "Mercury Reduction Program," the MPCA reported that mercury releases were reduced about 68 percent between 1990 and 2000. The agency attributed most of these reductions to the banning or restricted use of mercury in batteries and paint as well as controls on incinerators. After the MPCA developed a process for the voluntary agreement program in 2000, the largest emitting facilities announced voluntary commitments. Activities focus on product use and process-related releases. From the efforts of the Mercury Reduction Initiative, we know that reducing mercury product use is typically the most cost effective and easiest solution to implement. Facilities also are evaluating process technology and feedstocks in order to develop long-term solutions for process-related releases. Cost-effective technologies are not yet available for many mercury sources. Several Minnesota companies are on the cutting edge in developing technology for their industry.

Below are examples of activities that Minnesota companies have undertaken in voluntary agreements.

1. Companies are actively seeking ways to reduce the amount of mercury entering their process streams including commitments to:
  - Repower coal-burning units to burn natural gas.
  - Reduce mercury emissions through the use of lower mercury coal (one company reduced mercury emissions in 2000 by more than 18 percent to 20 percent from 1990 levels through increased use of lower mercury coal).
  - Remove mercury from end-of-life vehicles before shredding for steel recovery.
2. An important step in reducing emissions is to characterize the source and fate of mercury. Facility testing has included the following:
  - Stack emissions testing, including mercury speciation.
  - Feedstock testing (i.e. coal, taconite ore analysis, scrap steel and related additives and alloys).
  - Facility mass balance assessment.
3. Several companies are involved in significant research including:
  - Support of research entities that focus on mercury prevention and controls (i.e. Electric Power Research Institute and the Environmental Research Center's Center for Air Toxics and Metals).
  - Facility-specific research, including bench and full-scale studies of promising control technologies and partnering with national research organizations to assess various control technologies.
  - Working with vendors who conduct bench-scale studies of potential control technologies that are specific to particular feedstocks and plant configurations.
  - Waste characterization studies, including assessment of long-term fate of mercury in waste products.
4. Several companies have conducted inventories of mercury-containing products (i.e. thermometers, thermostats, switches) that are used at facilities. One company removed and recycled nearly 70 pounds of mercury from products used at its facility. In addition, companies have adopted procurement policies that substitute mercury-free alternative products, where feasible.
5. Companies have conducted mercury programs with their customers, employees and communities including free disposal programs, recycling centers, thermometer swaps and education programs.

MPCA estimates that 90 percent of mercury deposition in rural Minnesota and 70 percent of deposition in urban areas result from emissions transported in the atmosphere from other states and countries. The Minnesota Chamber policy emphasizes the critical role of the federal government in establishing a national policy on mercury.

In 2006, the Legislature passed the Mercury Emissions Reduction Act which establishes a goal of reducing mercury emissions from power plants by 90 percent by 2015. The Chamber also supports the

mercury TMDL that was adopted by the MPCA and submitted to the Environmental Protection Agency in July 2006.