

## Ontario Farm Environmental Coalition brief to Minister Helen Johns on Bill 81, Nutrient Management Act

May 21, 2002

### **Introduction**

Ontario farmers have long been known as "stewards of the land". Most producers have practiced nutrient management on their farms as part of their normal farming practices for many years. Agriculture is a land-based industry and as such its sustainability in Ontario depends on the availability of clean water and healthy soil. As farm leaders we are committed to supporting responsible handling of agricultural nutrients and promoting and encouraging all producers to use proper practices on their farms.

During the 1990s, Ontario farm leaders began to discuss the creation of a provincial act that would ensure all producers would adhere to common rules and standards for the application of nutrients to land for crop production. These rules and standards would ensure that farm practices did not negatively impact water quality in Ontario. Recently, in response to the Walkerton tragedy, additional groups have become involved in these discussions.

Ontario agriculture was pleased to see the introduction of Bill 81, Nutrient Management Act of Ontario. We are, however, somewhat disappointed by the slow progress of this bill to date. We are encouraged to see that nutrient management was mentioned in the recent Throne Speech and look forward to the passage of Bill 81. The Ontario Farm Environmental Coalition (OFEC) is pleased to see this initiative by our new Agriculture Minister, Honourable Helen Johns, and look forward to working with the Minister and her staff as regulations are developed under Bill 81.

OFEC feels strongly that regulations developed under Bill 81 must be developed to address issues related to nutrient management rather than in reaction to public perception. We fully recognize and admit that public perception issues must be addressed, however other means must be utilized. Restrictive regulations based on public perception will not effectively protect ground and surface water and will seriously threaten the sustainability of our industry.

OFEC is committed to assisting the Minister in dealing with the perception issues through education and awareness.

Commodity groups have been collectively working to develop a consensus position through OFEC to discuss with the Minister. We are very pleased to be able to present our position to you today and look forward to a very good discussion.

### **Ontario Farm Environmental Coalition**

The Ontario Farm Environmental Coalition represents over forty farm organizations in Ontario including livestock, poultry, cash crop, horticulture and general commodity groups. An overview of the groups that are members of OFEC has been included as Appendix 1.

OFEC works on environmental issues on behalf of Ontario agriculture and as such has been working on issues surrounding management of agricultural nutrients on farm for some time. In 1991, several worksheets were created to attest to the importance of managing nutrients on farm in conjunction with the development of the Environmental Farm Plan (EFP) Workbook. In 1992, OFEC established a "Water Quality Working Group" after the group identified preserving water quality in the province as a critical agricultural issue. This Working Group also implemented a "Partners in Nitrogen Utilization Project" which continues to yield practical, agronomic information about the feasibility of best management practices developed through research. In 1996, OFEC formed a "Nutrient Management Working Group" to focus exclusively on issues relating to manure and other nutrients utilized for crop production on farms.

Significant accomplishments have resulted related to nutrient management issues since the formation of this group. For example, in March 1998, a Nutrient Management Planning Strategy was developed in consultation with relevant provincial ministries, municipal agencies and the University of Guelph. This provided a science-based process for setting and implementing standards that ensure Ontario's agricultural sector continues to grow and prosper with minimal negative environmental and societal impacts. OFEC also directed funding, provided through the National Soil and Water Conservation Program (NSWCP), to on farm projects that incorporated best management practices, a publication entitled "Nutrient Management Planning", a two-day conference on nutrient management planning and a Rural Clean Water Program in one of the provinces largest watersheds. As well, NSWCP funding supported several applied research projects addressing specific elements of nutrient management planning such as timing of application, determining the species of origin of pathogenic organisms, and an evaluation of the impact grazing cattle have on the quality of surface water sources. Most recently, OFEC has been a driving force behind the development of a legislative framework that will enable the province to regulate the manner in which nutrients are utilized in crop production.

## **Executive Summary**

Ontario agriculture feels that all nutrients applied to land must be responsibly managed under a plan or strategy. The majority of agriculture uses best management practices on farm that mitigate the risk of contamination by nutrients of ground and surface water. However, as best management practices continue to evolve, many producers need to update their practices or make modifications to their operations in order to meet the upcoming standards and regulations under this Bill. When managed properly, manure is an essential medium to provide crops with necessary nutrients.

Agriculture is an essential part of both the rural and urban economies in Ontario. Bill 81 presents an excellent opportunity for the Ontario Government to strengthen agriculture and identify agricultural sustainability as a provincial interest. Primary Ontario agriculture is an over 7.78 billion dollar industry and contributes significant jobs to the province. As such, it is mandatory that this Bill focus not only on environmental protection but also business retention of primary agriculture and associated enterprises.

Ground and surface water protection is a complex issue that has both shared responsibilities and benefits for the agriculture sector and society as a whole. Although Bill 81 focuses on ground and surface water protection, other issues such as soil erosion and greenhouse gas emissions must also be taken into account when finding a balanced solution to nutrient management and environmental protection. Standards and regulations for nutrient management must be supported by proven research. Bill 81 must allow for the diversity of animal management systems and cropping practices. In addition, regulations and standards must focus on risk management principles that permit Ontario agriculture to remain globally competitive and allow for advances in knowledge, technology and management systems. Prior to implementation, all proposed regulations and standards must undergo environmental and economic impact assessment.

It is essential that provincial regulations and standards supercede municipal by-laws dealing with nutrient management. Other related provincial legislation must be consistent with the intentions of Bill 81. Ontario agricultural commodity groups advocate that OMAF must be the lead ministry in the development, implementation, administration and enforcement of Bill 81 to ensure consistency across the province.

Ontario agriculture endorses the creation of provincial legislation for nutrient management provided the associated regulations for the agri-food sector are agronomically, environmentally and economically sustainable. OFEC has provided specific positions on potential regulations under Bill 81 as outlined by the current legislation in the following "Industry Position on Bill 81" document.

## **Agriculture Industry Position on Bill 81: Nutrient Management Act of Ontario**

The specific position of OFEC on various aspects of Bill 81 has been detailed in the following Working Document. Rationale or further information about some positions is included as italicized text.

### **Macro Principles for Nutrient Management**

All nutrients applied to land must be responsibly managed under a plan or strategy.

The majority of Ontario producers are committed to handling their nutrients responsibly. For the majority, the introduction of this Bill will simply require their efforts to be formalized. For others, this will be an excellent chance to be educated about environmental protection practices and, as a result, make modifications in their operation. Since soil and water are the foundation of agriculture, we as an industry cannot be sustainable if producers are not managing nutrients responsibly.

Responsible application of manure to the land for crop production is an essential method of utilizing nutrients produced by livestock and poultry for the purpose of meeting the nutrient requirements of crops.

Manure is a valuable commodity essential for crop production and as such it is not a waste. When creating regulations specific to manure, the focus must be on optimizing nutrient uptake by crops rather than waste disposal.

Agriculture is an essential part of the rural and urban economies in Ontario. Ontario agriculture shares responsibility with society for environmental sustainability within the province.

Ground and surface water protection is an extremely complex issue that benefits all society. Agricultural production directly benefits society by utilizing nutrients from bio-solids. In addition, many sectors of agriculture help society through environmental endeavours such as practicing soil conservation, and preserving and protecting natural wetlands. While some practices such as soil conservation directly impact on crop production, many of these efforts do not equate to increased efficiency or overall production on farm. While we agree that the agriculture industry must responsibly handle nutrients to avoid ground or surface water pollution, we strongly feel that society must take responsibility as a whole for nutrients generated and used and that agriculture be recognized as an essential means to maintain environmental sustainability in Ontario.

Ontario agriculture endorses the creation of provincial legislation for nutrient management. Associated regulations for the agri-food sector must be agronomically, environmentally and economically sustainable.

### **General Issues Relating to Bill 81**

OMAF must be the lead ministry in the development, implementation, administration and enforcement of Bill 81.

OMAF is knowledgeable in normal farm practice, extension based education and has existing links with the agriculture sector.

Bill 81 is proactive legislation that deals with standards and regulations for management and application of nutrients to land. Standards and regulations for nutrient management must be supported by proven research.

Regulations must be based on current proven science. We recognize there are gaps in environmental science; however, we need to use best available knowledge in areas where there is limited scientific research. Regulations must be based on environmental protection and not on restrictions to farm size or type based on public perception.

Regulations and standards must focus on risk management principles that permit Ontario agriculture to remain globally competitive.

The Ontario agriculture industry exports approximately eight billion dollars worth of produce. Excessively stringent regulations would hinder the ability to compete in a global marketplace and could severely dampen the future of many sectors of agriculture in Ontario. Furthermore, many Ontario commodities trade freely within Canada. Drastic differences in environmental regulations provincially will affect the sustainability of the Ontario agriculture industry.

Provincial regulations and standards must supercede municipal by-laws dealing with nutrient management. Other related provincial legislation must be consistent with the intentions of Bill 81.

Currently, inconsistent municipal by-laws are threatening the viability of Ontario agriculture by placing overly restrictive demands on producers. Regulations must be fair and consistent. Agriculture is a provincial interest and as such regulations must be province wide.

Prior to implementation, all proposed regulations and standards must undergo environmental and economic impact assessment.

Environmental and economic impact studies MUST be done to ensure that regulations are feasible (and practical) for both society and the agriculture industry. Environmental and economic impact assessment prior to implementation will help to estimate the cost and benefits associated with the implementation of the proposed regulations and standards. Regulations must have a positive cost/benefit or they should not be implemented.

Regulations and standards must allow for advances in knowledge, technology and management systems.

As technology unfolds, agriculture must have opportunities to incorporate systems that have proven efficiencies on farm. There must be an ability to change regulations in order to incorporate new technology based on evolving science and technology.

Regulations must be subject to periodic consultative review of not less than 5-year intervals commencing at the point of implementation of regulations. Standards must be flexible enough to allow for new knowledge, technology and management to be incorporated into individual Nutrient Management (NM) plans.

Producers need predictability that changes they make on farm will comply with regulations for a given period of time – and that the bill will not be re-opened frequently. However, in the same respect, stakeholders need flexibility at periodic intervals to change regulations based on unfolding technology. Regulations and standards must address the diversity of animal management systems (eg. confinement vs. non-confinement livestock rearing, conventional tillage vs. no-till, greenhouse vs. market gardening), soil management and cropping practices.

The agriculture industry consists of great diversity. Even within commodities there are dramatic differences between operations across the province. As a result, it is not feasible to create blanket regulations that apply to each and every management system.

Any penalties levied under the proposed Nutrient Management Act must reflect the seriousness of the infraction with respect to ground and surface water protection.

An appeal mechanism must be established. The appeal mechanism must ensure disputes are resolved in a timely fashion.

Appeals must either be handled in a timely fashion by the Farm Products Appeal Tribunal or the Environmental Review Tribunal provided personnel are added to the tribunal that are knowledgeable in normal farm practice and agronomic principles.

Costs of administration, approval, certification, audit/inspection and training/education must be borne by the Ontario government.

Benefits of Bill 81 will be realized by all of society. Furthermore it is the combined responsibility of all society to work to protect ground and surface water.

As a result, the costs of implementation and administration of Bill 81 must be shared with all Ontario citizens. The agriculture industry has and will continue to contribute significant in-kind contributions of time and money to protecting ground and surface water through endeavours such as updating manure storage, testing soil and manure samples and creating nutrient management plans.

## **NUTRIENT MANAGEMENT PLANS**

### **Nutrient Management Planning Requirements**

The format and structure of the NM plan set out by the OFEC NM Strategy (March 1998) and as adopted by OMAFRA should be the basis for use in this Bill.

Essential elements of a NM plan include specific details of livestock on farm (species, management, number), nutrient storage (type of nutrient, size and location of storage), land where nutrients are applied (soil characteristics, crop rotation, slope, proximity to water), crop nutrient requirements, and application method.

Modifications to NM Plan format, structure or criteria must be developed by a consultative process involving industry.

This model has been successfully adopted by the Ontario Pesticides Education program.

### **Qualifications of persons carrying out nutrient management planning**

Producers must have the option to complete their individual NM plan or contract an external party to complete the NM plan on his/her behalf.

Educational courses must be available and fully funded by OMAF to assist producers in all aspects of NM.

Individuals charging a fee-for-service for completing a NMP must be certified by OMAF.

Educational courses will enable the majority of producers to prepare their own NM plans, if they desire.

This will not only increase producers' awareness of potential risks on their farm, but also emphasize the scientific rationale for utilizing best management practices on farm. Some producers will prefer to have a consultant complete their NM plan. These producers will still have to ensure they follow the details of the plan to mitigate the risk of agricultural nutrients entering ground and surface water.

### **Requirements for manure and soil sample taking**

Producers must be able to take their own soil samples as outlined in Best Management Practices (BMP) for Nutrient Management.

Producers should be able to use samples collected on-farm or industry averages for manure composition. OMAF must build a credible manure composition database for all livestock commodities.

### **Requirements for testing of samples**

Laboratory testing of soil and manure samples must be performed by an accredited laboratory using established testing standards.

### **Site Risk Assessment**

The Environmental Farm Plan (EFP) should be the basic environmental risk assessment tool used on farms. The EFP is a comprehensive assessment of potential risk for ground and surface water contamination. Corrective actions suggested are based on best management practices. Further assessment is the responsibility of the municipality, watershed area or provincial government. Over 22,000 Environmental Farm Plans have been completed to date and have resulted in producers across Ontario making improvements in their operation that lead to enhanced environmental protection. The EFP format is simple to understand and complete, yet addresses major ground and surface water risks. Detailed hydrogeological studies are not feasible at a farm level. These studies extend far past the boundaries of an individual farm and would threaten the future of most farms due to their cost and complexity.

### **Approval of NM Plans and Strategies**

It must be the responsibility of OMAF for approval of both new and expanding operations. Approvals must be carried out by a team of qualified personnel who are knowledgeable in normal farm practices, agronomy, engineering, environmental protection and the Act. An appeal mechanism must be developed to resolve disputes relating to reviews and approvals.

### **Record keeping**

Any minor variation from the approved plan, such as cropping changes, must be recorded and maintained with the NM plan and/or strategy.

Nutrient management records including actual records of application, cropping and soil tests should be retained for a minimum of 6 years or normal cropping rotation if longer.

### **Amendments**

Any changes (not requiring a new NM plan for such purposes as a Building Permit) that require modifications to storage and/or changes in land-base (ownership, rental agreement or contractual agreements for sales of manure), must be detailed in an amendment to the NM plan.

### **NM Plan Expiry**

Nutrient Management plans should be updated annually or as often as required as a result of cropping or management changes.

Approved nutrient management plans should be valid until a prescribed change in the agricultural operation or other prescribed activity takes place.

NM plans must be updated by producers when changes in cropping practices or soil test results occur. A review based on a nominal number of years would serve no purpose and would add unnecessary administration and cost to the procedure.

### **Access to Registry of NM plans and Audit Reports**

Nutrient Management plans and audit reports are not public documents. Third party certification or producer declarations that a NM plan has been created must be registered with an upper tier municipality. Any public release of data must be on an aggregate basis only.

Producers must be able to file declarations in writing and not just in electronic format. It is estimated that approximately 30% of farmers have an on-farm computer.

## **Nutrient Management Plans – Approval, Inspection and Audit**

### **Qualifications of Inspectors or Auditors**

Inspectors/auditors must be qualified OMAF personnel who are knowledgeable in normal farm practices and the Act.

Frequency of Inspections

Random inspections for all producers.

Criteria should be developed to evaluate complaint driven inspection protocol.

### **Biosecurity**

Administrative functions, including inspection and audit, performed under Bill 81 must be done in a fashion that complies with biosecurity protocols on the farm involved.

The producer will provide biosecurity protocols at the time of inspection. These protocols will be attached to the official NM plan or strategy. In some cases, an inspector may have to return to a farm for further inspection in order to meet quarantine or clothing requirements.

### **Local County Committees**

All upper tier municipalities must establish a locally funded nutrient management advisory committee that works on issues specific to Bill 81.

These committees must be the first point of contact to deal with non-pollution complaints as directed to them by the municipality.

Advisory committee members must be knowledgeable of Bill 81 and normal farm practices.

OMAF/MOE must ensure that committee members have received appropriate training.

All complaints must be made in writing to upper tier municipalities.

Farm visits must be conducted by peer representatives from these committees and be accountable back to the committee.

The role of the committees should be that of assessment of the situation, providing recommendations and communication back to complainant.

OMAF and other parties receiving complaints must refer complaints to the appropriate municipalities.

Upper tier municipalities will develop a standard procedure for dealing with complaints.

## **IMPLEMENTATION OF BILL 81**

### **Principles of Grandfathering Existing Operations**

Management of nutrients will not be grandfathered but will be addressed through implementation of effective phase-in plans.

Grandfathering will apply where existing structures do not meet site setback distances but will not exempt producers from demonstrating plans to mitigate risk in order to meet NM standards. These operations will be subject to earlier phase-in.

### **Phase-In**

Phase-in time will apply for both completion of NMP and associated corrective actions.

Phase-in should apply to all farms within 5-year period from implementation of regulations.

Phase-in time should include ample time for education/training for producers.

Optimal phase-in schedule should be industry-wide as follows:

Year 1 and 2 – All expanding or new operations will continue to be required to have a third-party audited NM plan. For all other operations, year 1 and 2 will be an education/training period.

Year 3 – Nutrient management plans and strategies mandatory for all generators and users of nutrients.

Year 4 – Enforcement of regulations on all farms with respect to nutrient application.

Year 5 – Enforcement of all regulations.

Additional consideration to phase-in must be on actual and not perceived risk (size). A large farm is not necessarily a greater threat. OMAF must be committed to completing necessary research in terms of crop nutrient uptake, especially in the field of horticulture.

## **MANURE STORAGE**

Standards for Size, Capacity and Locations of Barns

Run-off must be controlled from all barns and yards to protect ground and surface water.

As per BMP, locate new or expanding barns away from areas such as wells, tile drains, natural wetlands and watercourses.

Existing operations - see Principles of Grandfathering.

Standards for Size, Capacity and Location of Manure Storage Loading areas around manure storages

Producers must develop a contingency plan as part of an individual NM plan that addresses how a spill would be managed.

### **Run-off**

Run-off must be controlled from all storage to protect ground and surface water.

Run-off must be controlled using BMP. Methods to control run-off other than containment are accepted as BMP based on scientific efficacy data and should be allowed as a feasible method to mitigate risk to ground and surface water.

### **Covered Manure Storages**

Covers may be used as an optional tool for manure storage within an individual NM plan but must not be considered mandatory under Bill 81.

### **Earthen Manure Storages**

Engineering guidelines must be met.

### **Storage Capacity**

A province-wide specific minimum days of storage requirement is not practical or feasible for all soil types/climate conditions or all livestock systems.

Storage requirements will vary with operation type, management system and location.

Minimum storage capacity required must be based on the individual NM plan or strategy to allow application of nutrients to optimize soil fertility and protect ground and surface water.

On farm storage capacity will have to be developed on an individual farm basis to avoid the need to spread at times when the risk to the environment is the greatest and to avoid run-off from storage once the maximum capacity has been reached. Research to determine "spreading days" on the basis of climatic records must be conducted by OMAF and regional maps prepared. This research would help producers to balance cost of storage with environmental protection when developing storage on farm.

### **Location**

As per BMP, locate new or expanding manure storage structures away from areas such as wells, tile drains, natural wetlands and watercourses.

Existing structures - see Principles of Grandfathering.

### **Purchase, Sales or Transfer of Manure**

All manure sold or transferred must be detailed both under the NM strategy of the seller and the NM plan of the purchaser.

Written agreements between the generator of nutrients and the receiver will establish the responsibility of each party.

## **SPECIFIC LIVESTOCK ISSUES**

### **Outside Animal Rearing**

Location and Operation of "Feeding Lots" and Other Places Where Farm Animals Are Kept Outside  
Run-off and nutrient leaching from lands where animals are reared outside must be controlled to protect ground and surface water.

Restriction of Farm Animals to Water and Watercourses

Protection of Watercourses and Wetlands

Utilize Best Management Practices for Buffer Strips on Farms (subsection: Livestock Grazing Near Water) (currently under final stages of development by OCA, OSMA, DFO, MOE, OMAF).

### **Disposal, Storage and Transportation of Dead Animals**

This is not an appropriate Act to deal with this issue.

Bill 81 deals with nutrients and how to optimize their use in crop production while protecting ground and surface water. Disposal of deadstock is waste disposal.

## **NUTRIENT APPLICATION**

### **Spreading Rates**

Use of prescribed nutrients on lands used for production

Spreading levels must be determined by individual NM plan.

### **THIS IS THE ESSENCE OF BILL 81.**

Land Base/Type for Application

Individual NM plans will dictate required land base or specifics of required contract sales of manure.

Land base must be in the care, custody and control of the producer either through ownership, written rental agreement or addressed through a written manure agreement.

Land base requirements of NM plans must not be distance dependent or restricted by municipal jurisdictions.

Existing by-laws have different requirements in different municipalities. Producers must not be limited by physical boundaries with respect to spreading. Minimal land ownership must not be dictated by Bill 81 – this will seriously limit the long term sustainability of agriculture. For example young producers are often not able to purchase land when they begin farming so they rent for a period of time.

Time and Manner in Which Spreading Can Take Place

Post tillage

All manure must be incorporated within 48 hours or sooner if possible.

Exceptions to this include no-till, forage crops, pasture, orchards, inclement weather etc

Pre-tillage before spreading liquid manure

Pre-tillage is required on tiled crop land.

Exceptions allowed include no-till, forage crops, pasture, orchards, etc. provided appropriate compensating practices are identified and addressed in an individual NM plan.

### **Limitations on Manure Application**

No application on snow-covered, frozen or saturated grounds except for unique situations as identified and addressed in an individual NM plan and based on BMP. Snow covered, frozen or saturated grounds are defined as soil conditions that do not allow incorporation within 48 hours.

Legislative limitations on spreading based on specific dates or seasons does not address ground and surface water protection.

Specific dates do not take into account the wide diversity in weather conditions that exists across Ontario. In our view specific dates put unnecessary constraints on some producers and areas of the province with no real benefit realized to the environment.

NM plans must have contingency plans to address the application of manure in emergency situations.

### **High Trajectory Manure Applicators**

Use of high trajectory manure applicators should be phased out within 1 year of enactment of the regulations.

#### **Set Back Distances from Rural Non-Farm Use (Built Up Areas)**

Manure spread within 100 feet of a rural non-farm use must be incorporated within the same day.

Minimum separation distances from water features such as wells, watercourses, and open drains must be noted in individual NM plans and be based on BMP. Agriculture does not support regulated notification prior to spreading. This is nutrient management legislation and should not attempt to regulate odour or rural community issues. All producers should carry out a "good neighbour" policy.

### **Standards for equipment used to transport and or transfer nutrients**

Appropriate application equipment

Individual NM plans will indicate appropriate application equipment.

Application equipment must be calibrated and operated properly to ensure nutrients are consistently applied at the desired rate.

### **Transportation of Manure**

The transportation requirements of NM plans should not be distance dependent and manure should be transported in accordance with existing provincial and municipal government regulations.

Parties transporting manure must develop a contingency plan that addresses how a spill during transportation would be managed.

### **Qualifications of Nutrient Applicators**

All custom applicators must successfully complete an OMAF accredited course within 1 year of courses being available. This course structure and criteria to be developed by a joint OMAF/industry committee.

Custom applicators must include bio-solids, commercial fertilizer and manure applicators when the equipment operator is paid on a fee-for-service basis.

Farm application will be covered under NM plans.

Access of farm animals and persons to land on which manure has been spread

It is unnecessary to develop regulations in this area.

Unauthorized persons on land on which manure has been spread is dealt with under the Trespass Act.

This does not apply to grazing animals on pasture.