

1 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 biosolids. 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.

2 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 also 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 in some areas of the province. 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 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.

- Auditing and enforcement functions must be performed by the same unit within OMAF, for any on-farm non-pollution event that results from an infringement of that farm's Nutrient Management Plan.

- 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, training/education **and capital improvements required by farmers to meet the requirements of the Nutrient Management Act** must be borne by the Ontario government.

Benefits of Bill 81 will be realized by all of society. Given that it is the combined responsibility of all society to work to protect ground and surface water. It is appropriate that 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 endeavors such as updating manure storage, testing soil and manure samples and creating nutrient management plans.

3 NUTRIENT MANAGEMENT PLANS

3.1 Nutrient Management Planning

3.1.1 Requirements

- The format and structure of the NMP set out by the OFEC Nutrient Management Strategy (March 1998) and as adopted by OMAF should be the basis for use in this Bill.

Essential elements of a NMP 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 NMP 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.

3.1.2 Qualifications of Persons Carrying Out Nutrient Management Planning

- Producers must have the option to complete their individual NMP or contract an external party to complete the NMP on his/her behalf.
- Educational courses must be available and fully funded by OMAF to assist producers in all aspects of nutrient management.
- 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 NMPs, 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 NMPs. 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.

3.1.3 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.

3.1.4 Requirements for Testing of Samples

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

3.1.5 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 23,000 Ontario Farmers have attended Environmental Farm Plan workshops to date, resulting 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.

3.1.6 Approval of Nutrient Management 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.

3.1.7 Record Keeping

- **A standardized format for record keeping should be fully funded and made available to farmers to ensure consistency.**
- Any minor variation from the approved plan, such as cropping changes, must be recorded and maintained with the NMP and/or Nutrient Management Strategy (NMS).
- 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.

3.1.8 Amendments

- Any changes (not requiring a new NMP 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 NMP.

3.1.9 Contingency Plans

- **NMPs must have contingency plans to address situations where an emergency application of manure is necessary, and where an emergency situation arises from the application of manure.**

3.1.10 NMP Expiry

- NMPs 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.

NMPs 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.

3.1.11 Access to Registry of NMPs and Audit Reports

- Nutrient Management plans and audit reports are not public documents. Third party certification or producer declarations that a NMP 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. **Producers should not be required to file declarations in electronic format.** It is estimated that approximately 30% of farmers have an on-farm computer.*

3.2 Nutrient Management Plans – Approval, Inspection and Audit

3.2.1 Qualifications of Inspectors or Auditors

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

3.2.3 Frequency of Inspections

- Random inspections for all producers.
- Criteria developed to evaluate complaint driven inspection protocol.

3.3.3 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 NMP 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.

3.3.4 Local County Committees

- **OMAF must establish and co-ordinate** locally funded nutrient management advisory committees **at the upper tier level** that work 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.
- **No less than two-thirds of every local advisory committee should be composed of members of the local farming community.**
- Advisory committee members must be knowledgeable of Bill 81 and normal farm practices.
- OMAF/MOE must ensure that committee members, **including non-farm rural residents**, have received appropriate training.
- All complaints must be made in writing to upper tier municipalities.
- Farm visits must be conducted by **agricultural 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.

4 IMPLEMENTATION OF BILL 81

4.1 Principles of Grandfathering

4.1.1 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.

4.1.2 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.

4.1.2 Optimal Phase-in Schedule

- Year 1 and 2 – All expanding or new operations will continue to be required to have a third party audited NMP. 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.

5 MANURE STORAGE

5.1 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.

5.2 Standards for Size, Capacity and Location of Manure Storage

5.2.1 Loading Areas Around Manure Storages

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

5.2.2 Run-off

- Run-off from manure storage must be controlled 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.

5.2.3 Covered Manure Storages

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

5.2.4 Earthen Manure Storages

- Engineering guidelines must be met.

5.2.5 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 NMP 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 determining appropriate storage capacity requirements for a particular farm.

5.2.6 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.

5.2.7 Purchase, Sales or Transfer of Manure

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

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

6 SPECIFIC LIVESTOCK ISSUES

6.1 Outside Animal Rearing

6.1.1 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.

6.2 Restriction of Farm Animals to Water and Watercourses

6.2.1 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).

6.3 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.

7 NUTRIENT APPLICATION

7.1 Spreading Rates

7.1.1 Use of Prescribed Nutrients on Lands Used for Production

- Spreading levels must be determined by individual NMP.
- THIS IS THE ESSENCE OF BILL 81.

7.1.2 Land Base/Type for Application

- Individual NMPs 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 NMPs 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.

7.2 Time and Manner in Which Spreading Can Take Place

7.2.1 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.

7.2.2 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 NMP.

7.2.3 Limitations on Manure Application

- No application on snow-covered, frozen or saturated grounds except for unique situations as identified and addressed in an individual NMP 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.

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

7.2.4 High Trajectory Manure Applicators

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

7.2.5 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 NMPs 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.

7.3 Standards for Equipment Used to Transport and or Transfer Nutrients

7.3.1 Appropriate Application Equipment

- Individual NMPs will indicate appropriate application equipment.
- Application equipment must be calibrated and operated properly to ensure nutrients are consistently applied at the desired rate.

7.3.2 Transportation of Manure

- The transportation requirements of NMPs 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.

7.4 **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 NMPs.

7.5 **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.