CANADIAN ENVIRONMENTAL LAW ASSOCIATION

July 25, 2005 CELA Publication #524

EBR Registry Number: RC05E0001
EBR Contact Info: EBR Co-ordinator
Strategic Policy Branch
Ministry of Agriculture Food and Rural Affairs
77 Grenville Street, 11th Floor
Toronto, ON M5S 1B3

Delivered via Facsimile & Regular Mail

Re: Nutrient Management Act Changes June 2005

INTRODUCTION:

The Canadian Environmental Law Association, Sierra Legal Defence Fund, Georgian Bay Association, Environmental Defence, Ottawa Riverkeeper, Citizens Environment Alliance, Coalition on the Niagara Escarpment and Friends of the Earth Canada write to provide our analysis and recommendations regarding the proposed changes to the *Nutrient Management Act* Regulation that were announced June 22, 2005, with comments due July 25, 2005.

We consider the Province's response to key recommendations made by Justice O'Connor regarding regulation of farms to be urgent. The two key recommendations are:

Recommendation 12
Where necessary, the Ministry of the Environment should establish minimum regulatory requirements for agricultural activities that generate impacts on drinking water sources.

Recommendation 13
All large or intensive farms, and all farms in areas designated as sensitive or high-risk by the applicable source protection plan, should be required to develop binding individual water protection plans consistent with the source protection plan.

The Province has yet to adequately respond to these recommendations. Regarding Recommendation 12, the Province appears to be working toward establishing the minimum regulatory requirement for all farms, but results are not anticipated for several years. Regarding Recommendation 13, although the *Nutrient Management Act* Regulation is geared toward livestock operations (phasing-in the largest ones first), the requirement of

binding individual water protection plans consistent with local source protection plans may or may not be met by the existing nutrient management planning requirements. We hope that the Province will move quickly to implement source water protection planning and the minimum regulatory requirement for all farms. In the meantime, we hope that existing regulation of nutrients will not be significantly weakened.

ANALYSIS OF CHANGES AND RECOMMENDATIONS ARISING:

We have examined the proposed changes in detail and provide the following explanation as to our understanding of how nutrient management is proposed to change in the province of Ontario and how it will thereafter apply. We also provide several recommendations.

A. Who would now be covered by the *Nutrient Management Act*?

There are six categories that will now be covered by the *Nutrient Management Act* and regulations. These are as follows:

- Expanding livestock farms greater than 5 nutrient units – triggered either by need for a building permit or by building a new earthen storage, in either case on or after November 1, 2005 – NEW
- Newly establishing livestock farms greater than 5 nutrient units or livestock farms expanding to greater than 300 nutrient units have been covered since 2003 – now there will also be a trigger for livestock farms greater than 5 nutrient units where an earthen storage facility is constructed
- Existing large livestock farms greater than 300 nutrient units – covered as of 2005 – modifications to the existing regulations will provided that these farms would be phased-in in 2005
- Any of these categories within 100 metres of a municipal well* – for additional requirements – NEW
- Large municipal sewage treatment generators are already covered under the *Nutrient Management Act* and are now being phased-in for Nutrient Management Strategies
- Livestock farms greater than 300 nutrient units who accept non-agricultural source materials (biosolids) will also have to prepare a Nutrient Management Plan

*A phased-in farm unit wherein any portion of the farm unit is located within 100 metres of a municipal well.

It is proposed that more livestock operations be phased-in under the *Nutrient Management Act*. However, as can be seen in Table 1 and will be discussed below, the regulation also proposes to weaken the mandatory requirements imposed on these operations in several respects.

B. Who is not covered by the *Nutrient Management Act* yet?

- Existing livestock farms under 300 nutrient units

- All other (not yet phased-in) operations accepting agricultural or non-agricultural source material (although the latter are still covered by the Certificate of Approval process under the *Environmental Protection Act*)

Do these existing livestock farms and all farms that apply manure and biosolids have any new requirements if they are within 100 metres of a municipal well?

- No, not yet

When will these existing livestock farms be covered by the *Nutrient Management Act*?

- If the livestock farm expands and has to apply for a building permit, then at the time of expansion
- If the livestock farm does not expand, then our understanding is that the Province will oversee the development of a short list of science-based standards for all livestock farms, which will begin to cover all farms in 2008. The short list is yet to be developed and the exact timing of application of the short list requirement to all farms is also yet to be determined.
- The Province's Backgrounder of June 22, 2005 states,

  > "Over the next two years, a short list of nutrient management standards will be developed that could, over time, apply to all farms in Ontario beginning in 2008. A short list of science-based, minimum nutrient management standards that are not costly to implement, would lower producer's liability, and would eventually apply to all farms in Ontario will be developed in consultation with stakeholders and the Provincial Nutrient Management Advisory Committee. Approaches to phase-in and financial assistance would also be developed for possible implementation in 2008."
- Applying the short list requirement to all farms would be consistent with Justice O'Connor's recommendation 12 in which he called for a minimum "regulatory floor" to apply to all farms in respect of manure management. In his report in this context, Justice O'Connor stated:

  > "Some types of agricultural activities may constitute a threat to drinking water sources regardless of where they take place in a watershed. For example, manure storage and handling practices that do not follow guidelines for minimum distance separation from wellheads, or improper storage of large amounts of manure, may threaten drinking water anywhere. Such activities should be subject to province-wide regulation, not guidelines."

We consider the Province's response to this aspect of Justice O'Connor's report to be urgent. However, as noted above, a short list requirement to be applied to all farms will not be the same requirements that farms may have to develop through Farm Water Protection Plans which Justice O'Connor also recommended as the farm level plan to implement watershed based Source Water Protection Plans.

Recommendation: The short list of requirements to be applied to all farms should be developed and in place as soon as possible, prior to development of the farm water protection plans for source water protection.

Recommendation: Prior to development of the short list of requirements, all livestock operations within 100 metres of a municipal should immediately be phased-in under the *Nutrient Management Act*.

C. What do those who are now covered have to do under the *Nutrient Management Act*?

1. Nutrient Management Strategies (NMS's)

- The phased-in livestock farms listed above will all be required to prepare Nutrient Management Strategies but only the new and expanding livestock farms and phased-in livestock farms within 100 metres of a municipal well will have to have them approved by the Ministry of Agriculture and Food. Existing large farms above 300 nutrient units will only have to register their NMS's with the Province, but do not need to have them approved. Even for the NMS's that need only be registered, it is mandatory that they be followed and is an offence to fail to comply with them.
- In addition, generators of non-agricultural source materials (biosolids) still require approval of NMS's. Non-agricultural source materials must also obtain a Certificate of Approval from the Ministry of the Environment for land application. Examples of non-agricultural source materials include pulp and paper biosolids and sewage biosolids. The NMS's for biosolids must set out all planned destinations for the material, including land application, landfill disposal, incineration, composting or other processing. These generators must also report annually as to the actual destination of the materials.

What is in a Nutrient Management Strategy?
It describes the operation, any agreements for the receipt of the nutrients, sketches the farm units and provides the farm unit declaration form, lists the materials generated and received, analyses their nutrient content, outlines the destinations and storage facilities for the nutrients, including the volume of material requiring storage, the days of storage and the amount remaining, and provides a contingency plan.
The farm unit sketch required in a NMS can be hand drawn, photograph or computer generated and must indicate the land owned or controlled that forms part of the farm unit, road names, municipal boundaries, neighbours and other local features and must indicate location of nutrient generating facilities, both permanent and temporary, including dimensions and distances from lot lines. The farm unit sketch must also provide the distances to sensitive features within the farm unit and beyond within regulated distances, including:

- Known wells (includes gas, oil, test and water wells)
- Municipal wells
- Tile inlets
- Surface water
- Other non-agricultural land uses

There will no longer be an option to use a "short form" NMS. There will now be an additional requirement that the NMS must contain a contingency plan for situations where there are more nutrients than anticipated, there are unanticipated releases of nutrients and changes in weather or equipment.

Recommendation: Existing large farms should have their Nutrient Management Strategies approved by the Province; not merely prepare them and register them with the Province.

Proposed changes to the regulation will see renewal of strategies after five years or upon application for a building permit or construction of an earthen storage, but not on change of ownership nor on an increase of 20 percent or more in the quantity of nutrients nor on a change in use of the nutrients nor on the loss of available destinations as the regulation currently provides. However, NMS's and NMP's will have to be reviewed and updated annually to reflect the anticipated operation on the farm in the following year. Records of the annual review and update must be kept on the farm, together with other records provided in the recommendations. Renewals of NMS's after five years do not need to be approved if they are prepared at least 90 days before the original strategy ceases, unless the approval was for non-agricultural source material generation.

Recommendation: Nutrient Management Strategies should be required to be revised and where applicable, approved and/or registered upon change of ownership, increase of nutrient quantity or loss of available destinations for the nutrients.

2. Nutrient Management Plans (NMP's)

- As for Nutrient Management Plans, only new or expanding livestock farms greater than or equal to 300 nutrient units, any phased-in livestock farm that receives non-agricultural source material and any phased-in livestock farms within 100 metres of a municipal well need to prepare NMP's. These NMP's need to be prepared by a certified person, but are not filed with the Province nor approved and need only be kept on the farm and available to provincial inspectors. Compliance with these NMP's is mandatory and it is an offence to fail to comply with them.
- The phased-in livestock farms receiving non-agricultural source materials (biosolids) still require approval of NMP's (in fact these are the only farms who will still receive approvals of NMP's under the current regulation.)

What is in a Nutrient Management Plan?
Most of the items outlined above for the NMS are included, plus field sketches and field properties, soil samples and analysis information, crop rotation and yields, tillage practices, commercial fertilizer application, application of prescribed materials, agronomic and crop removal balance for nitrogen, agronomic and crop removal balance for phosphorous, common land application setbacks and limits and demonstration of an adequate land base.
These important elements of a NMP will now be required for farms equal to or greater than 300 nutrient units or phased-in farms within 100 metres of a municipal well, but unless the operation is a large livestock farm receiving biosolids, these plans will no longer receive an Ontario Ministry of Agriculture and Food approval. And, fewer livestock operations are required to prepare NMP's at all (previously the new greater than 5 nutrient unit livestock farms would trigger the requirement of an NMP by being required to have an NMS – under the proposed amendment, these livestock operations would only now be required to have NMS's). There will now be an additional requirement that the NMP must contain a contingency plan for situations where there are more nutrients than anticipated, there are unanticipated releases of nutrients and changes in weather or equipment.

Recommendation: All farms generating or receiving agricultural source or non-agricultural source nutrients should be required to prepare a Nutrient Management Plan and to apply nutrients within the crop uptake requirements and other application and setback limits provided by the regulation. That requirement should be extended to all other farms as soon as possible.

Recommendation: Existing large livestock farms should have their Nutrient Management Plans approved by the Province rather than merely prepare them and keep them on the farm.

3. Priority Land Application and Setback Standards

- Specific land application standards will be mandatory for livestock farms greater than or equal to 300 nutrient units and any other phased-in livestock farms within 100 metres of a municipal well.
- The land application standards will be recommended as best management practices for other farms, but are not mandatory. (Therefore, for example, an existing 275 nutrient unit farm within 100 metres of a municipal well does not yet have any mandatory requirements under the *Nutrient Management Act* to follow the land application standards.)
- We expect this situation to change with the development of a short list of requirements that will be applicable to all farms beginning in 2008. In addition, once the Province introduces watershed based source water protection, expected this fall 2005, there will be additional requirements developed for all sectors, including agriculture, to provide protection to source waters in vulnerable areas.

Recommendation: Section 40 of the regulation should be revoked. This is the provision that states that the land application standards are applicable only to those farms larger than 300 nutrient units, those phased-in livestock farms located within 100 metres of a municipal well, and those farms larger than 300 nutrient units receiving biosolids. Deleting section 40 would mean that the restrictions on applying manure close to wells, the requirements for stream buffers, the requirement not to over-apply manure on crops, and depth to groundwater provisions pertaining to manure application would all apply to all farms in Ontario. There is no reason whatsoever to support the status quo whereby all existing livestock farms below 300 nutrient units [and all other agricultural operations] may continue to apply manure legally without regard for well location, manure application rates, stream buffers and depth to groundwater.

4. Buffer and Application Setbacks near Surface Water

- The existing regulation provides for limitations on liquid "prescribed materials" (i.e. manure and biosolids, for example) being applied within 150 metres from the top of the bank of surface water, according to the soil group and the slope of the land. These restrictions will now no longer apply to liquid manure application, but only to non-agricultural source materials (i.e. biosolids). There is also currently a prohibition on application within 150 metres from top of bank for any "field slope of the land greater than 12 per cent". This provision has been removed for liquid manure application although biosolids still have a prohibition for application where the "maximum sustained slope of the land is greater than 12

per cent." These restrictions will now be best management practices only with respect to liquid manure application (while these issues undergo additional research over the next three years).

5. Slope Provisions

- The proposed regulation would set a new prohibition on application of liquid manure on slopes greater than 25% where they are within 150 metres of the top of bank of surface water. However for slopes proximate to surface waters, this provision should prohibit application of liquid manure on slopes greater than 9% (see Soil Resource Group *Review of Minimum Separation Distance from Surface Water, Final Report April 2005 at page 44).*

Recommendation: The application of liquid manure on slopes within 150 metres of stream banks should be prohibited where those slopes exceed a grade of 9%.

6. Application on Saturated Soil

- In the existing regulation, any phased-in livestock farm is prohibited from applying any nutrients (eg, both manure and biosolids) on saturated soils. The proposed amendment would remove this prohibition for any agricultural source material.

Recommendation: The existing prohibition on any phased-in livestock farm applying any nutrients (both manure and biosolids) on saturated soils should remain in place.

7. Manure Storage Construction Standards

- All categories of phased in farms will have to follow the manure storage construction and siting standards including setbacks when building such storages. [Many of the design and construction requirements currently contained in the Construction and Siting Protocol have not been included in the proposed Nutrient Management Protocol.] However, solid nutrient storages below 600 cubic metres with walls exposed less than 1 metre high are not required to comply with the manure storage construction standards, only with the siting standards. Those siting standards provide for example, that the phased in farms may not construct or expand a permanent nutrient storage facility within 15 metres of a drilled well, within 100 metres of a municipal well, within 30 metres of any other well, or in the case of biosolids, within 90 metres of any other well.

Recommendation: The Province should immediately extend the application of section 63, siting of permanent nutrient storage facilities to all farms in the province. No farm of any size should be constructing permanent nutrient storage facilities within 15 metres of a drilled well, 100 metres of a municipal well, 30 metres of any other well anywhere in the province. This extension of the application of section 63 should begin immediately.

8. Agricultural Source Nutrients – Sampling and Maximum Application Rates

The current regulation requires all those requiring a NMP to sample the soil and the materials to be applied to the land. The proposed amendments would restrict the sampling obligations to only those farms that require an NMP and are applying manure. Non-agricultural source material has different sampling requirements that will not be changed. For manure applications,

the soil will no longer have to be tested for pH. The manure will no longer have to be tested for ammonia and ammonium nitrogen. All testing will now have to be done at accredited lab.

The current regulations also set a maximum application rate for agricultural source materials that is determined by taking sample results and putting them into NMAN. It is proposed that the maximum application rate for manure (based on set concentrations of available phosphorus and potassium) not exceed the greater of (i) the crop production requirements per hectare plus 85 kg/ha of phosphorus and (ii) the phosphorus removed from the land per hectare in the harvested portion of the crop plus 390 kg/ha of phosphorus. The prohibition against applying more than the maximum is retained.

Other livestock farm wastes can be applied to land without meeting any sampling/application standards.

9. Outdoor Confinement Areas

- Phased-in farms currently have to follow the *Nutrient Management Act* regulations for outdoor confinement areas. These include requirements for the load-bearing surface (proposed to be revoked), prohibition on the construction/creation of new capacity in an existing outdoor confinement area unless location requirements are met (proposed to be revoked), livestock bedding and feeding (proposed to be revoked), prohibition on livestock access to surface water for farms with greater than 300 nutrient units, NMS, runoff management strategy, manure management (requirements for frequency of removal from outdoor confinement area, for example) and management of snow that contains manure.

The three sections proposed to be revoked do not appear in the proposed Nutrient Management Protocol. The first one means that existing large livestock farms will not have to upgrade their confinement areas. The third one means that livestock operations do not have to assure that natural material confinement areas meet the conditions that it is large enough and prevents the animals from sinking into the ground. The lack of setting location requirements (not permitted within 15 m of drilled well, 100 metres of municipal well, 30 metres of any other well, 15 metres of field drainage tile) on new or expanding outdoor confinement is a concern, particularly if "runoff management system" fails to adequately protect these identified water sources.

Recommendation: Maintain the "increase in capacity" restrictions on outdoor confinement areas.

- A "high-density" outdoor confinement area is currently triggered by livestock access hours (less than 4,800 hours per year), nutrient unit generated by the confined animals while confined (greater than 5 nutrient unit per hectare) and the farm size (livestock farm exceeds 300 nutrient unit). The proposed amendment would change the last condition to intensity of confinement (the outdoor confinement area contains animals generating 300 nutrient unit).

Recommendation: Retain the definition of "high-density outdoor confinement area" as being triggered by the intensity of the livestock operation, rather than the intensity of the confinement.

10. Runoff Management Systems

- Requirements for the runoff management system depend on whether the phased-in livestock farm has a nutrient storage facility, farm-animal yard or permanent outdoor confinement area. These requirements have not changed in the proposed amendments.

11. Record Keeping

- Farms required to prepare a NMS or NMP will have to keep them on the farm. A guidance document will be issued for farmers as to records to keep and the onus will be on the farmer to show compliance with the regulation, NMS's and NMP's where applicable.

D. Do the changes affect Biosolids (non-agricultural source materials)?

- Somewhat. The existing provisions of the NMA pertaining to biosolids generation continue to apply. However, the requirement for a NMP is limited to large livestock farms that accept these materials and relatively few of these will likely require an approved NMP. In the meantime it is essential that the *Environmental Protection Act* continue to provide protection under the existing process of issuing certificates of approval to generators of biosolids. However, on the farm, comprehensive nutrient management planning must take into account ALL sources of nutrients.

E. What requirements are proposed to be removed from the *Nutrient Management Act* regulations (e.g. to become Best Management Practices) and why?

- The existing regulation and protocol requirements pertaining to the Nitrogen Index, and the Phosphorous Index, many of the construction and siting requirements for nutrient storage facilities and outdoor confinement areas, application of manure on saturated soils and existing standards regarding maximum amounts of liquid manure that could be applied near streams have all been removed from the regulation pending additional research. These standards will instead be considered Best Management Practices in the interim.

F. What issues are to undergo further research prior to revising the *Nutrient Management Act* regulations and why? What is the time frame for this research?

- Research will be conducted on a priority basis over the next three years, in particular including those areas that have been moved from the regulation to best management practices, so that new regulations can be formulated based on the research. These topics will include the nitrogen and phosphorous index, application of manure on saturated soils and application of liquid manure near streams.

G. Who is eligible for financing under the revised financing program? Is there provision for voluntary phase in and access to the financing program?

- As announced, only existing large farms (over 300 nutrient units) and those who were using high trajectory irrigation guns for liquid manure application (which were prohibited as of March 31, 2005) are eligible to apply for the Nutrient Management Financial Assistance Program (NMFAP). CELA/Sierra Legal encourage the government to make the funding program more broadly available for example to other existing small and medium farms if they voluntarily phase themselves in to the nutrient management regulation requirements. CELA/Sierra Legal also encourage the government to establish a formal voluntary phase-in process so that other existing small and medium farms who have taken that step can be determined for the purpose of the funding eligibility.

In addition, we encourage the government to make the Nutrient Management Financial Assistance Program available to all phased-in farm units located within 100 metres of a municipal well.

Under the enhanced program as announced in June 2005, provincial cost share of certain nutrient management Beneficial Management Practices is not set at up to 40 to 60% of the cost; the federal cost-share under the Canada-Ontario Farm Stewardship Program is between 30 and 50 percent depending on the practice. The result is that up to 90% of the cost of these practices will be covered with various specified provincial funding caps for each item. For example, improved manure storage and handling may be eligible for up to $60,000 in provincial funding and $30,000 in provincial funding for a total of $90,000 under the new program. Manure treatment may be eligible for up to $30,000 in provincial funding and $30,000 in federal funding. Other Beneficial Management Practices that are eligible for funding include Manure Land Application, In-Barn Improvements, Farmyard Runoff Control, Livestock Confinement Areas, Water Well management, Riparian Area Management, Riparian and Non-riparian Erosion Control Structures, Nutrient Recovery from Waste Water, Nutrient Management Planning and Riparian Health Assessment all with various provincial and federal cost-share percentages and funding caps

Applications to this funding program are due by September 1, 2005. All projects under this program must be completed, invoices paid in full and the projects inspected by the Ontario Soil and Crop Improvement Association Program Representative by December 31, 2005.

See www.gov.on.ca/omaf under the Nutrient Management button for more information.

H. How does the *Nutrient Management Act* relate to watershed based source water protection?

- We do not yet have legislation for watershed based source water protection. Proposed legislation is expected to be introduced in the fall of 2005. When it is introduced and passed, based on the reports of the Source Protection Provincial Technical Experts Committee (November, 2004) and the Source Protection Provincial Implementation Committee (November, 2004) we expect that all watersheds will be required to characterize all threats to

water sources from all sectors including agriculture. Watershed source protection plans will be required to set out proposed measures to deal with those threats, to identify those responsible to implement those measures, and to identify mechanisms for evaluation and follow up of the measures taken. These watershed based source protection plans will be sent to the Minister of the Environment for approval following which they will become binding plans with resulting implementation mechanisms.

I. Aquaculture:

Open netcage aquaculture operations are feedlot operations that discharge faeces and waste into public waters. They should be brought into the *Nutrient Management Act* by requiring similar waste management treatment as land based aquaculture operations. In other words, all faeces and wastes should be captured and treated prior to discharge.

Recommendation: Open netcage aquaculture operations should be brought under the Nutrient Management Act regulations by requiring similar waste management treatment as land based aquaculture operations.

J. Hydrogeological Investigations:

Recommendation: A detailed hydrogeological study should be completed by a licensed Professional Geoscientist to support a planned new or expansion livestock operation, particularly where aquifer vulnerability is an issue.

Recommendation: A standard level of investigation should be adopted to ensure that the appropriate level of understanding of the groundwater environment is achieved prior to allowing the new or expansion livestock operation.

Recommendation: A GIS database of existing and proposed development should be maintained to allow for proximity analysis to sensitive aquifer systems, water supplies, and locally significant recharge zones that exist through out the province.

K. Other changes:

No Accredited Certifiers –
The existing regulation has a requirement that, after the end of 2005, review of an NMS/NMP not requiring approval could only be done by accredited certifier. Now, if not required to have approval, a farmer only needs to "register" the NMS.

Definition of commercial fertilizer will no longer have lower limit of nutrient content. As no commercial fertilizer use is regulated under the *Nutrient Management Act*, this amendment will have no impact.

NMAN Program – The use of this computer program for preparation of NMP's will become voluntary and other available models may also be used.

Construction and Siting Protocol and Local Advisory Committee Protocol will no longer exist. Only the requirement that there be an Engineer's Certificate regarding the design and construction of a new or expanding nutrient storage and the dry content of manure of the existing Construction and Siting Protocol have been transferred to the proposed Nutrient Management Protocol. The Local Advisory Committee Protocol set out the requirements for procedure, should such a Committee be established. As many of the currently regulated requirements will be moved to "Best Management Practices", they have been taken out of the applicable protocols. Those that are of particular concern are noted above.

Below is a Table outlining some of the current Nutrient Management regulation, some of the strengths of the proposed Nutrient Management regulation, and some of the weaknesses of both:

Table 1: Comparison of Existing and Proposed requirements under the *Nutrient Management Act*.

Strengths of the current Nutrient Management Regulation [proposed changes are noted in brackets]	**Strengths of the proposed Nutrient Management Regulation**	**Some of the weaknesses of both Nutrient Management Regulations (not exhaustive)**
Approval of Nutrient Management Strategy (NMS) required if either the livestock operation is greater than 150 nutrient units or a non-agricultural operation generates non-agricultural source material that will be applied to land (eg, sewage biosolids). [Approval will only required for new or expanding livestock operations (triggered by the need for a building permit or the construction of an earthen storage facility) and phased-in livestock farms within 100 metres of municipal well. Non-agricultural source material approval will be maintained.]	An increase in the number of livestock farms phased-in. Additional triggers for livestock farm phase-in – "within 100 metres of a municipal well" and construction of earthen storage facility.	There is no "minimum floor" regarding nutrient management that applies to all farms (per Justice O'Connor's Recommendation 12).
Approval of Nutrient Management Plan (NMP) required if either NMS required approval or non-agricultural source material is received. [Only the latter will require approval.]	Soil and manure sampling must be done at an accredited lab.	As source water protection planning has not yet been implemented, there is no way to determine what will be required to meet Justice O'Connor's Recommendation 13.
An accredited certifier must certify any other NMS or NMP that is required for the purposes of the regulation, but does not need approval. [Accredited certifiers have been removed. Any non-approved NMS or NMP need only be registered.]	Contingency plans required as part of NMS and NMP. Previously, these were just set out in the Nutrient Management Protocol.	Existing livestock farms under 300 nutrient units not phased-in.
An updated NMS or NMP must be submitted for approval at least 90 days before the fifth anniversary on which the approval was first given. [Renewals of NMS's after five years do not need to be approved if they are prepared at least 90		Existing farms (other than livestock operations) applying nutrients such as manure and sewage biosolids are not subject to regulation under the *Nutrient Management Act*.

days before the original strategy ceases, unless for non-agricultural source material generation.]		
Renewal of a NMS required if application for a building permit, on change of ownership, on an increase of 20 percent or more in the quantity of nutrients, on a change in use of the nutrients, and on the loss of available destinations as the regulation currently provides. [Will only require if application for a building permit or on construction of earthen storage facility.]		Aquaculture operations are not subject to the *Nutrient Management Act*.
Land application standards (such as application on saturated soils, near wells, rates of application, stream buffers, etc.) required for all phased-in livestock farms. [Will only be required for livestock farms greater than or equal to 300 nutrient units and any other phased-in livestock farms within 100 metres of a municipal well.]		Hydrogeologic investigations are not required of new and expanding livestock operations.
Standards regarding the design and construction of new and expanded nutrient storage facilities and outdoor confinement areas applicable. [Several of the existing requirements will be removed.]		
Farmers required to keep detailed records as to the implementation (activity log, when contingency plan invoked, etc.) of the NMS/NMP. [Farmers will be required to keep NMS/NMP and annual updates on the farm.]		

SUMMARY OF RECOMMENDATIONS:

Recommendation: The short list of requirements to be applied to all farms should be developed and in place as soon as possible, prior to development of the farm water protection plans for source water protection.

Recommendation: Prior to development of the short list of requirements, all livestock operations within 100 metres of a municipal should immediately be phased-in under the *Nutrient Management Act.*

Recommendation: Existing large farms should have their Nutrient Management Strategies approved by the Province; not merely prepare them and register them with the Province.

Recommendation: Nutrient Management Strategies should be required to be revised and where applicable, approved and/or registered upon change of ownership, increase of nutrient quantity or loss of available destinations for the nutrients.

Recommendation: All farms generating or receiving agricultural source or non-agricultural source nutrients should be required to prepare a Nutrient Management Plan and to apply nutrients within the crop uptake requirements and other application and setback limits provided by the regulation. That requirement should be extended to all other farms as soon as possible.

Recommendation: Existing large livestock farms should have their Nutrient Management Plans approved by the Province rather than merely prepare them and keep them on the farm.

Recommendation: Section 40 of the regulation should be revoked. This is the provision that states that the land application standards are applicable only to those farms larger than 300 nutrient units, those phased-in livestock farms located within 100 metres of a municipal well, and those farms larger than 300 nutrient units receiving biosolids. Deleting section 40 would mean that the restrictions on applying manure close to wells, the requirements for stream buffers, the requirement not to over-apply manure on crops, and depth to groundwater provisions pertaining to manure application would all apply to all farms in Ontario. There is no reason whatsoever to support the status quo whereby all existing livestock farms below 300 nutrient units [and all other agricultural operations] may continue to apply manure legally without regard for well location, manure application rates, stream buffers and depth to groundwater.

Recommendation: The application of liquid manure on slopes within 150 metres of stream banks should be prohibited where those slopes exceed a grade of 9%.

Recommendation: The existing prohibition on any phased-in livestock farm applying any nutrients (both manure and biosolids) on saturated soils should remain in place.

Recommendation: The Province should immediately extend the application of section 63, siting of permanent nutrient storage facilities to all farms in the province. No farm of any size should be constructing permanent nutrient storage facilities within 15 metres of a drilled well, 100 metres of a municipal well, 30 metres of any other well anywhere in the province. This extension of the application of section 63 should begin immediately.

Recommendation: Maintain the "increase in capacity" restrictions on outdoor confinement areas.

Recommendation: Open netcage aquaculture operations should be brought under the Nutrient Management Act regulations by requiring similar waste management treatment as land based aquaculture operations.

Recommendation: A detailed hydrogeological study should be completed by a licensed Professional Geoscientist to support a planned new or expansion livestock operation, particularly where aquifer vulnerability is an issue.

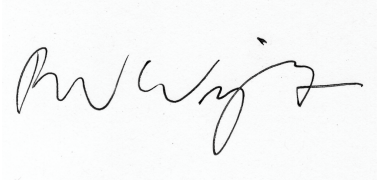
Recommendation: A standard level of investigation should be adopted to ensure that the appropriate level of understanding of the groundwater environment is achieved prior to allowing the new or expansion livestock operation.

Recommendation: A GIS database of existing and proposed development should be maintained to allow for proximity analysis to sensitive aquifer systems, water supplies, and locally significant recharge zones that exist through out the Province.

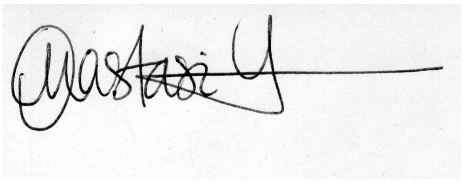
We trust these comments are of assistance to the Province and look forward to your consideration of our concerns. Canadian Environmental Law Association, Sierra Legal Defence Fund, Environmental Defence and Georgian Bay Association would be pleased to meet with you at any time to review these issues.

Yours truly,

Canadian Environmental Law Association
per Theresa McClenaghan, Counsel



Sierra Legal Defence Fund
per Rob Wright, Counsel



Sierra Legal Defence Fund
per Anastasia M. Lintner, Staff Lawyer

Georgian Bay Association
per Mary Muter

Environmental Defence
per Rick Smith

Ottawa Riverkeeper
per Meredith Brown

Citizens Environment Alliance
per Derek Coronado

Coalition on the Niagara Escarpment
per Bradley Shaw

Friends of the Earth Canada
per David B. Brooks