



**Intensive Livestock Operations in Quebec
A Discussion Paper**

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INTRODUCTION

In the aftermath of the Walkerton tragedy, where seven people died and over 2300 people in Ontario were made ill from water contaminated by manure, the threats posed by agricultural pollution to human health and the environment have become difficult to ignore. Governments are slowly beginning to recognize what most rural residents have long known: as the agricultural sector undergoes greater industrialization and intensification the dangers of agricultural pollution also increase.¹ This growing awareness of the realities of agricultural production has led some jurisdictions to re-evaluate their legislation regarding agricultural practices.²

In Quebec, hog farms present the greatest potential source of agricultural pollution. Research conducted in 1996 showed Quebec to be the largest hog-producing province in Canada, with 30% of the total market share. (Ontario was a close second with 26% of the market share.)³ Moreover, the hog industry is expanding and new net investment in hog farms has been on the rise in Quebec since the early 1990s. In 1995, new investment in hog farming totaled roughly \$75-million for that year alone.⁴ As a proponent of the hog industry proudly touts, “once dominated by the family farm, with most production taking place in operations with 100 to 300 sows ... the industry now commonly features 1,200- to 2,400-sow operations. ... This trend is leading to a much higher concentration of the industry, with a relatively low proportion of producers accounting for the bulk of production...”.⁵

¹ A. Mussell and L. Martin in their article, “Manure as a Public Health Issue: What Accountability and Direction for Livestock Agriculture”, The George Morris Centre, have persuasively suggested that smaller farms can also be a significant source of agricultural pollution. While this discussion will focus on the threats posed by large or intensive operations, it is nonetheless important to consider this information when designing legislation to prevent agricultural pollution.

² See for e.g. the recent “Proposed Standards for Agricultural Operations in Ontario” from the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Summer 2000.

³ See “Overview of the Hog Industry”, available on-line at <http://res2.agr.ca/initiatives/manurenet>

⁴ *Ibid.*

⁵ *Ibid.*

While there are currently many agricultural operations with 1,000 to 2,000 animals, we can anticipate that this number will likely expand to the tens of thousands.⁶ Perhaps a source of pride to a few owners of intensive livestock operations, this increase is also a legitimate source of alarm for many rural residents. Such large intensive livestock operations will produce vast amounts of animal waste. A single breeding sow produces 3.1 tons of solid manure per year.⁷ An operation of 10,000 hogs would produce approximately 5.3 million gallons of liquid sewage a year, which has been estimated to be the equivalent of 25-30,000 people.⁸ The risk of some of this waste escaping into the surrounding environment is real and cause for concern.

The environmental threats posed by large agricultural operations have been thoroughly examined elsewhere⁹ and need not be elaborated on here. It is sufficient for the purposes of this paper to make the following general observations. Most of the environmental concerns relate to the handling, storage and use of animal waste. Large-scale livestock facilities (or large composting facilities) can emit intolerable odours. While not directly damaging to the environment, these odours are a considerable nuisance and can aggravate respiratory ailments of neighbouring residents and are a serious problem for workers at these operations. When manure is applied to soil, nitrates, phosphates and other potentially harmful substances, such as antibiotics and bacteria, accumulate. This leads to declining soil and water quality. Greater damage occurs when run-off from fields, or from leaking manure storage facilities, contaminates nearby water sources. Manure releases ammonia, hydrogen sulfides and methane into the air and can affect human health and the ecosystem more generally.

⁶ In a recent case in Alberta, a small community rejected a proposal by the Taiwan Sugar Corporation to construct a 150,000-hog operation. The owners of the company were nonetheless confident that they would have little difficulty establishing their operation in another area in Canada. (See "County kills hog-factory plan", *The Globe and Mail*, July 12, 2000.)

⁷ U.S. Senate Committee on Agriculture, Nutrition and Forestry, "Animal Waste Pollution in America: An Emerging National Problem" (Washington, D.C., 1997). Available online at: <http://www.senate.gov/-agriculture/animalw.htm>

⁸ Longstaff, F., "Animal Waste Good, Human Waste Bad", *St. John's Globe*, N.B., Aug. 10, 2000.

⁹ See e.g., (1) Nikoforuk, A., "When water kills: The dangerous consequences of factory farming are being felt across the country" *Maclean's*, June 12, 2000, (2) "Concern grows about pollution from megafarms", *The Globe and Mail* (May 30, 2000), (3) "Overview of the Hog Industry: Environmental Issues", *supra*, note 3. (4) Miller, G., "The Protection of Ontario's Groundwater and Intensive Farming" Report to the Ontario Legislative Assembly, June 27, 2000.

It is in the context of the above reality in Quebec that this paper reviews the legislation regulating agricultural operations in the province of Quebec.

THE LEGISLATION

1. Federal Legislation and the Environmental Side-Agreement to NAFTA

At the federal level, the *Fisheries Act* is the primary law that could be used to address agricultural pollution. This Act prohibits the unauthorized deposit of a harmful substance into water frequented by fish, or into water that may eventually flow into water frequented by fish.¹⁰ Livestock manure and run-off from livestock operations could be deemed to be a ‘harmful substance’ within the meaning of the Act. Moreover, the harmful alteration, disruption, or destruction of fish habitats is also prohibited. Environment Canada is responsible for the enforcement of pollution control provisions of this Act.

It should be noted however, that this Act would likely be of limited use to those interested in restricting the operation and construction of agricultural operations given that provincial governments retain the right to legislate with respect to provincial lands and waters.¹¹

There are also provisions under the environmental side agreement to North American Free Trade Agreement which allow citizens to petition the Commission for Environmental Co-operation to investigate “flagrant national violations of pollution rules”.¹² The environment ministers from Canada, Mexico, and the U.S. make the final determination as to whether an investigation should proceed. It should be noted however, that recommendation for investigations are rare. As of 1999 the commission had called for investigations only four times.¹³

Generally, the regulation of agricultural operations in order to control adverse environmental effects is handled by provincial and municipal governments.

¹⁰ *Fisheries Act*, R.S.C. 1970, c. F-14, ss. 34-36.

¹¹ *The Constitution Act*, 1867, s.92

¹² See, The Globe and Mail, Dec. 4, 1999.

¹³ *Ibid.*

2. Provincial and Municipal

The following pieces of legislation address the regulation of agricultural operations in Quebec:

1. *An Act Respecting the Preservation of Agricultural Land and Agricultural Activities, / Loi sur la protection du territoire et des activités agricoles,*¹⁴
2. *An Act Respecting Land Use Planning and Development / Loi sur l'Aménagement et l'urbanisme,*¹⁵
3. *Environment Quality Act / Loi sur la qualité de l'environnement,*¹⁶
4. *The Regulation respecting the reduction of pollution from agricultural sources / Règlement sur la réduction de la pollution d'origine agricole.*¹⁷

I. The Right to Farm

An Act Respecting the Preservation of Agricultural Land and Agricultural Activities (“*Preservation of Agricultural Land Act*”) may be characterized as Quebec’s “right to farm legislation”. The Act, which came into effect in June 1997, is administered by a Commission composed of sixteen government-appointed members. The Commission reports to the Ministry of Agriculture, Fisheries and Food.

The stated purpose of this Act is to secure the preservation of the agricultural land of Quebec and to promote the development of agricultural activities and enterprises. To this end, the Act requires that “in the exercise of its jurisdiction [i.e., in its deliberations and judgments], the Commission shall give proper consideration to the fact that it is in the general interest to preserve agricultural land and agricultural activities”.¹⁸ Moreover, the Act requires municipalities, in respect of agricultural regions in their territories, to “exercise [their] powers in

¹⁴ *An Act Respecting the Preservation of Agricultural Land and Agricultural Activities*, R.S.Q. 1997, c. P-41.1 [hereinafter *Preservation of Agricultural Land Act*]

¹⁵ *An Act Respecting Land Use Planning and Development*, R.S.Q. c. A-19.1 [hereinafter *Land Use Act*]

¹⁶ *Environment Quality Act*, R.S.Q. 1978, c. Q-2 [hereinafter *Environment Quality Act*]

¹⁷ *The Regulation Respecting the Reduction of Pollution from Agricultural Sources*, 1997, G.O. 2, 2607 [hereinafter *Agricultural Pollution Regulation*]

¹⁸ *Preservation of Agricultural Land Act*, *supra*, note 14, s. 12.

the area of land use planning and development in such a way as to promote priority for the use of land for agricultural activities...”.¹⁹ Much of the legislation is thus concerned with the protection of farmland from residential and commercial development. Summarized below are those sections that would be pertinent to the discussion of intensive agricultural operations.

a) “Agricultural Zones”

Unlike the *Farming and Food Production Act* in Ontario, the protection offered by the Quebec statute does not extend to the entire province, but is limited to what are termed ‘agricultural zones or regions’. There are approximately 600 such areas in Quebec. Generally, any lands within an agricultural zone may not be used for any purpose other than agriculture. Given that the Act only protects those agricultural operations situated within specially designated regions, it is important to note the procedural rules governing their creation.

The Government reserves the right to identify any part of the territory of Quebec as a designated agricultural region.²⁰ Agricultural zones are created by a decree from the Minister of Agriculture, Fisheries and Food, which may act through the Commission. The Commission must prepare and file a provisional plan identifying the boundaries of the proposed zone. The plan must include all local municipalities situated within a designated agricultural region.²¹

Within 180 days of the Commission giving notice that it intends to create an agricultural zone, any interested person may make representations to local municipalities situated within the zone. The municipality must hold a public meeting to hear the arguments and presentations of any interested parties. Should there be an agreement between the local municipality and the Commission, the Commission proceeds with the preparation of an agricultural zone plan. However, should the municipality and the Commission fail to reach an agreement, the statute states that the Commission should nonetheless prepare an agricultural zone plan of the municipal

¹⁹ *Ibid*, s.79.1

²⁰ *Ibid*, s. 22

²¹ *Ibid*, ss.34-35

territory which “takes into account any representations made by interested parties”.²² The Commission submits the plan to the Government for approval. Once a plan is approved, the decree becomes effective.²³

The Act does contain provisions that in some circumstances would allow a municipality to review and possibly alter the agricultural zone plan.²⁴ Section 69.1 states: “A ... municipality ... that undertakes to elaborate a development plan may apply for the review of the agricultural zone.”

b) Immunity from Liability

As with most pieces of ‘right to farm’ legislation, the central provisions of the Act are those shielding farmers from nuisance actions. While the Quebec statute does not absolutely prohibit a plaintiff from initiating a nuisance action, unless “the damage is the result of deliberate or gross fault or if the damage is not directly caused by activities related to animal produce operations”,²⁵ once the agricultural operation meets the requirements set out in the statute, as well as all regulations adopted under the *Environment Quality Act*, the operator of the agricultural operation is shielded from all liability in nuisance.

Section 79.17 of the Act states:

In an agricultural zone, no person shall incur liability toward a third person by reason of dust, noise or odours resulting from agricultural activities, or shall be prevented by a third person from exercising such agricultural activities...

Section 100 of the Act states:

Where a residential, commercial, industrial or institutional building has been erected after the issue of a certificate of authorization, under the Environmental Quality Act, ... allowing the establishment or expansion of an animal produce operation, the owner of the occupant of that building shall not act before the courts to claim damages or to prevent the operation or development of that farm be reason of its proximity, or odours or noise emanating therefrom

With respect to a livestock raising farm established before the Environment Quality Act was in force and is applicable to it, the owner or the occupant of a

²² *Ibid*, s. 48

²³ *Ibid*, ss. 47-50

²⁴ *Ibid*, s. 69.1

²⁵ *Ibid*, s. 100

residential, commercial, industrial or institutional building erected after the establishment of an animal produce operation shall not act before the courts to claim damages or to prevent the operation or the development of that farm by reason of its proximity or the odours or noise emanating therefrom.

As discussed below, it is also important to observe that in addition to shielding agricultural operators from nuisance liability, the Act also protects operators from most municipal zoning laws that interfere with agricultural practices.

II. Municipalities and the Right to Control Land Use

The regulation of land use planning generally falls within the jurisdiction of the municipality. *The Act Respecting Land Use Planning and Development* (“*Land Use Act*”), administered by the Minister of Municipal Affairs, sets out general policy objectives relating to future development and the procedural rules governing the establishment of ‘regional development plans’. All counties and municipalities must maintain a regional development plan in force at all times.

Interestingly, what may be deemed ‘right to farm’ provisions have been directly incorporated into Quebec’s land use planning statute. Section 5(2.1) states:

A development plan, must ... determine such land use guidelines and land use designations as the regional county municipality considers appropriate to ensure, in the agricultural zone within its territory, that land use planning and *development standards are compatible with the objective of ensuring priority for the use of land for agricultural activities* and, within that framework, the harmonious co-existence of agricultural and non-agricultural uses. [Emphasis added]

Additionally, unlike the right to farm legislation of some other jurisdictions,²⁶ the Quebec statute further extends the scope of ‘the right to farm’ to include protection from certain restrictive municipal by-laws. Section 98 of the *Preservation of Agricultural Land Act* states: “This Act prevails over any provision of a land use and development plan, a master plan or zoning, subdivision or construction by-law.” The Act does not however, completely undermine

²⁶ Kalmakoff, J., “‘The Right to Farm’: A Survey of Farm Practices Protection Legislation In Canada”, (1999) 62 Sask. L. Rev. 225 at 235.

the ability of municipalities to regulate land use with respect to agriculture. Agricultural operations must comply with some municipal by-laws. Section 79.17 of the *Preservation of Agricultural Land Act* states that an agricultural operator will only be shielded from nuisance liability if all agricultural activities are exercised in accordance with regulatory standards adopted by a municipality under the *Land Use Act*.

The relevant sections of the *Land Use Act* concern the application of minimum separation distances (MSDs). Although the Act states that a council of a municipality may adopt any zoning by-law “for the object of specifying ... the open space that must be left between different structures and uses”,²⁷ it is later stated that a zoning by-law may *not* contain a provision establishing a separation distance where one of the structures, or one of the uses to which it applies, is in an agricultural zone (as established under the *Preservation of Agricultural Land Act*). A municipality can only impose MSDs for the purpose of the preservation of a water supply or reducing the inconvenience resulting from the odours caused by agricultural activities. Even then, the by-law can only impose a MSD to a structure, or use of a structure, in an agricultural zone if the minimum separation distance is in respect of an area where manure is spread and a non-agricultural structure or use exists.²⁸ Simply, a municipality can only impose MSDs if it can show that they are necessary to protect the water supply or reduce odours, and even then a by-law can only set an MDS if it is in relation to areas where manure is actually spread (as compared to, for example, an area where livestock are kept). When the *Preservation of Agricultural Land Act* and the *Land Use Act* are read together, it would seem that municipalities do not have the ability to regulate the size or number of agricultural facilities in an agricultural zone beyond the standards established under the *Environment Quality Act* (discussed below).

It is noteworthy that sub-paragraphs 16 and 16.1 of s. 113 the *Land Use Act* grant municipalities the ability to:

²⁷ *Land Use Act*, supra, note 15, s.4

²⁸ *Ibid*, s.113

...regulate or prohibit all or certain land uses, structures or works, taking into account the proximity of a place where the present or planned presence or carrying out of an immovable or an activity results in land occupation being subject to special restrictions *for reasons of public safety, public health or general welfare.* [Emphasis added]

Municipalities may avail themselves of the powers granted under this clause to regulate agricultural operations if it could be shown that agricultural pollution constituted a significant hazard to public health. This is certainly a credible argument following the Walkerton tragedy.

With respect to the issue of land use planning, it should also be noted that the *Preservation of Agricultural Land Act* provides a mechanism whereby owners of agricultural producers can apply for the intervention of a mediator if they feel that the activity of their operation is unduly constrained or prevented by a municipal planning by-law or nuisance by-law adopted after June 1997.²⁹ The mediator reports to the all the relevant parties in the dispute. Ultimately, it remains with the local municipality to make a final determination about the status of the by-law.

“Agricultural Advisory Committees”

The *Land Use Act* provides that every municipality whose territory includes an agricultural zone must establish an “agricultural advisory committee”.³⁰ The legislation requires that at least of one half of the members of the committee be farm producers. It is the function of the committee to examine, either on its own initiative, or at the request of the municipality, any matter relating to agricultural land planning, the practice of agricultural activities and the environmental aspects pertaining to such planning and practice. It is important to note however that these advisory committees are consultative bodies only. The committee’s powers are limited to making recommendations to the council of the municipality.³¹ Agricultural advisory committees do not have a role in any dispute resolution process for agricultural operators and private individuals.

²⁹ *Preservation of Agricultural Land Act*, supra, note 14, s.79.3

³⁰ *Land Use Act*, supra, note 15, ss. 148.1-148.6

³¹ *Ibid*, s.148.6

III. Environmental Protection Legislation

Before the protection offered by the *Preservation of Agricultural Land Act* can be invoked, the agricultural operation must be in compliance with existing environmental laws and regulations. In Quebec, agricultural operators must comply with the *Environmental Quality Act* and all regulatory standards adopted under this Act.

The *Environment Quality Act* is Quebec's primary environmental legislation. It contains provisions addressing the protection and conservation of the soil, water and air. The objective of the Act is clearly stated in section 19:

Every person has a right to a healthy environment and to its protection, and to the protection of the living species inhabiting it, to the extent provided for by this Act and the regulations, orders, approvals and authorizations issued under any section of the Act and, as regards odours, to the extent prescribed by any municipal by-law adopted ...under the *Act Respecting Land Use Planning and Development*.

Provisions specific to agricultural pollution and authorized by the *Environment Quality Act* are found in the *Regulation respecting the reduction of pollution from agricultural sources*. Key features of this regulation are set out below.

Regulation respecting the reduction of pollution from agricultural sources (“Agricultural Pollution Regulation”)

This regulation came into force on July 3, 1997.³² It replaced the *Regulation respecting the prevention of water pollution in livestock operations*. Administered by the Ministry of the Environment, it has been promoted by the government as being a specific legislative response to the intensification of the livestock industry. The stated purpose of the regulation is to protect water and soil against pollution caused by agricultural activities. The Regulation prohibits the deposit or discharge of livestock waste into the environment. It aims to minimize the environmental impacts of animal and plant production by prescribing standards for the construction of facilities used to raise livestock and store their waste, and by regulating the

spreading of all fertilizing substances, including animal waste, farm compost and mineral fertilizers.

a) Scope and Definition

Notwithstanding the Ministry's claim that this regulation specifically addresses the intensification of the livestock industry,³³ it does not explicitly delineate small scale farming operations from those operations that are sufficiently large to be characterized as 'factory farms'. The regulation is designed to cover all agricultural activities. For the purposes of the regulation, one livestock unit equals one cow or one horse or five breeding pigs (20-100kg each) or 25 piglets under 20kg each, or 4 sows, plus piglets not weaned within the year.

b) Protected Zones (ss. 27-31)

In an attempt to protect aquatic environments and water intakes, the regulation prohibits various agricultural activities in 'protected zones'. The Regulation defines protected zones as any area within the following perimeters:

- The bed of a watercourse or lake and the 15 m area surrounding it ...,
- A spring, an individual well or an individual surface water intake, and the 30m area surrounding it, unless the well belongs to the owner of the livestock facility...,
- A water intake used to produce spring water or mineral water, or to supply a municipal waterworks and the 300m area surrounding that water intake...,
- A swamp, natural marsh or pond... and the 15m area surrounding their perimeter,
- The 20-year flood plain of a water course of lake.

³² The regulation was amended in June, 1998 and in April, 1999. In November 1999 the Minister of the Environment published draft legislation to amend the Regulation.

³³ Ministry of the Environment, "Reduction of pollution from agricultural sources". Available online at: <http://www.menv.gouv.qc.ca>

In cases where a yard is in use, i.e., an enclosure where livestock is kept for the purposes other than pasture, there are further criteria that extend the protected zone.³⁴

In protected zones prohibited activities include;

- Erecting or installing a livestock facility or storage for livestock waste serving the facility,
- Altering the facility for the purpose of increasing the number of livestock units
- Enlarging a livestock building
- Altering the facility for the purpose of substituting hogs in place of another species of livestock
- Altering a livestock building for the purpose of replacing a solid manure management system with a liquid manure management system.
- Replacing livestock where it results in an increase in the volume of waste

The regulation also restricts the number of livestock units that can be held in any facility located partially or entirely in a protected zone.³⁵ For example, the maximum number of livestock units a hog producer may raise in a protected zone is 200, and a cattle producer is only authorized to keep 250 livestock units in a facility situated in a protected zone.³⁶

c) *Conditions and limits on the spreading of fertilizing substances and Agro-Environmental Fertilization Plans (AEFPs) (ss. 14- 26)*

As noted above, one of the primary sources of agricultural pollution is run-off from cultivated fields. Farm producers frequently spread livestock waste on cultivated land in quantities exceeding plant needs. When the soil and crops are no longer able to retain or absorb the fertilizer, it can filter towards watercourses or underground water tables, contaminating them.

The *Agricultural Pollution Regulation* requires farm operators to manage all fertilizing substances, including livestock waste, farm compost and mineral fertilizers, in compliance with specific provisions. The regulation establishes minimum distances that fertilizing substances may

³⁴ *Agricultural Pollution Regulation*, *supra* note 17, s.28

³⁵ *Ibid*, s. 31

³⁶ *Ibid*, Schedule V

be spread near water sources. Farm producers must also ensure that there is no run-off from livestock waste into areas near water sources. As noted above, municipalities can enact by-laws with minimum distance separation standards beyond those established by the Regulation. The regulation forbids the spreading of livestock waste using a sprinkler or liquid manure canon. In most cases, the spreading of any fertilizing materials is prohibited between October 1 to March 31 given that crops no longer absorb fertilizers during this time or because melting snow can carry waste into water sources.

In Quebec, the spreading of livestock waste can, generally, only be carried out after a agro-environmental fertilization plan (AEFP), or nutrient management plan, has been prepared. The AEFP must determine, for each parcel of land in the farming operation and for each annual growing season, the crop grown and the amounts of all fertilizing substances that may be applied to the land.³⁷ The plan must be prepared in accordance with provisions and spreading limits set forth in the regulation. These spreading limits are based on a ratio between anticipated nutrient requirements of the crop and the nutrients supplied by the soil and by fertilizers from all sources, including animal waste and mineral fertilizers. The regulation also requires that the spreading limit must be determined “in accordance with environmentally sound farming practices and shall take into account the characteristics of the region ... particularly ... the topographical characteristics of the soils, climatic conditions, precipitation, irrigation and drainage”.³⁸ Information required in the plan includes quantity and characterization of manures produced, characteristics and locations of receiving soils (including the location of springs, wells, rivers, lakes, watercourses, ditches, and swamps), crop types to be grown, rates of application and manure handling and application plans. The plan must be prepared and signed by a professional agrologist or a professional technologist who is a member of the *Ordre des agronomes du Québec*.

Agricultural producers may also prepare their own AEFP, provided that they have been certified as having taken a training course authorized by the Ministry of the Environment.

³⁷ See ss.14, 32, 88 and 92 of the Regulation and Schedule III for specific nitrogen and phosphorus limits

³⁸ *Agricultural Pollution Regulation*, supra, note 17, s. 18

Regardless of how they are prepared, all AEFPs must comply with the standards and conditions imposed by the Regulation. The plan may cover a single annual growing season, or two or more successive seasons, up to a maximum of five seasons.

Farm operators must also keep a spreading register for each parcel of land in their agricultural operation. Farm operators must retain a record of their plans and their spreading registers for up to two years after activities have been completed and must provide the plan for review when requested by the Minister of the Environment.

While it would seem that ratios of ‘hectares of land to number of livestock units per hectare’ coupled with the conditions imposed by the regulation would be an effective tool for limiting the number of livestock units that could be raised on a given parcel of land, these standards can be flexible. The regulation allows for some agricultural activity to be carried out in municipalities where the areas necessary for the spreading of livestock waste produced by the operation are insufficient given the ratios fixed in the Regulation. In these areas, referred to as ‘limited activity zones’, works such as enlarging a livestock facility or increasing the number of livestock units in a liquid livestock facility are permitted provided that a certificate of authorization (discussed below) has been granted. A certificate of authorization will only be issued if:

- The farm producers own the land on which the manure is to be spread; or
- The waste is treated by a method authorized by the Minister under the *Environment Quality Act*; or
- agricultural operators contract with a surplus manure management organization certified by the Minister of the Environment.³⁹

Should the agricultural operator opt to enter into an agreement with a manure management organization, the only condition imposed by the regulation is that a copy of an AAFP covering the parcel of land on which the manure is spread be drawn up and given to the manure management organization. The farm producer must also keep a register of livestock waste

³⁹ *Ibid*, ss. 32-36.

shipped outside the agricultural organization. The register must contain all information on the livestock waste shipped for spreading, storage or processing purposes.

d) Construction Standards and Building Codes (ss. 37-48)

The regulation requires that facilities storing animal waste be watertight and establishes specific standards for their design so as to prevent runoff. Storage facilities must have the capacity to receive and accumulate, without overflow, the livestock waste produced by the operation over a minimum period of 250 days. Some solid manure storage facilities are exempt from the watertight requirement provided that they are located far enough from protected watercourses and the manure must come from facilities whose livestock population is lower than the limit prescribed by the Regulation.⁴⁰

e) Certificate of Authorization (ss. 70-82)

One of the stated purposes of the regulation is to “maintain the application of sections 22 to 24 of *Environment Quality Act ...*”, i.e., those provisions which deal with certificates of authorization. Section s. 22 of the *Environment Quality Act* states that:

No one may erect or alter a structure, undertake to operate an industry, carry on an activity or use an industrial purpose or increase the production of any goods or services if it seem likely that this will result in an emission, deposit ... or discharge of contaminants into the environment or a change in the quality of the environment, unless he first obtains from the Minister a certificate of authorization.

Section 24 of the Act provides:

The Minister shall, before giving his approval to an application made under section 22, ascertain that the emission, deposit, issuance or discharge of contaminants into the environment will be in accordance with the Act and the regulations. He may, for that purpose, require any alteration in the plan or project submitted.

⁴⁰ Facilities may be exempt from the watertight requirement provided that the livestock population of the operation is less the 35 livestock units, and less than 5 livestock units if the operator is raising hogs.

The regulation lists several construction projects and activities subject to authorization by the MOE, including:

- Alterations to a livestock building in order to increase the capacity for housing livestock;
- Enlargement of a livestock building;
- An increase in the number of livestock units beyond the maximum authorized under the *Environment Quality Act*⁴¹ ...

Any farm producer wishing to undertake such works must apply to the Minister for a certificate of authorization. Any application for authorization, under the requirements of the Act and the Regulation must include detailed plans and specifications of the project as well as an evaluation of any contaminants that the farm producer suspects might enter the environment.⁴²

f) Penalties (ss.83-84)

Individuals and corporations may be liable to a fine if they fail to comply with the regulation. The amounts of the penalties vary according to whether the offence is a first or repeat offence and whether the offence may be characterized as ‘administrative’ or ‘environmental’. The fines that may be imposed are summarized in the table.

Individual	Administrative Offence	Environmental Offence
First Offence	\$1,000 to \$15,000	\$2,000 to \$20,000
Subsequent Offence	\$4,000 to \$40,000	\$5,000 to \$50,000

⁴¹ Section 71 states that a farm operator may construct or alter a livestock facility without a certificate of authorization, if his operation has 10 hogs or less, or 10 cattle/horses on liquid manure management, or 30 cattle/horses on solid manure management. It may be noted that the provision refers to 10 animals rather than livestock units.

⁴² *Environment Quality Act, supra*, note 16, s. 22 and *Agricultural Pollution Regulation, supra*, note 15, ss.72-82

Corporation	Administrative Offence	Environmental Offence
First Offence	\$1,000 to \$90,000	\$2,000 to \$150,000
Subsequent Offence	\$4,000 to \$120,000	\$5,000 to \$500,000

GENERAL DISCUSSION

In many respects the Quebec legislation regulating agricultural operations appears, on its face, to be more comprehensive than the legislation of some other jurisdictions, particularly Ontario.⁴³ The legislation may be seen to include several features that address the problem of pollution from agricultural operations. Agricultural producers must comply with province-wide standards governing the construction of livestock facilities and the management and storage of wastes. Minimum distance separation formulae, established by regulation, must be observed. Municipalities are given the ability to enact further by-laws adjusting the minimum distance separations according to local conditions. The completion and approval of AEFPs, or nutrient management plans, covering all nutrients capable of causing adverse environmental impacts is mandatory. There are legislative provisions that address changes in the type, scale, and intensity of the operation. The enlargement of some facilities is prohibited in protected zones and in most cases agricultural operators must apply for a certificate of authorization from the Minister of the Environment before they may significantly alter the size and scope of their operation. Perhaps most importantly, while the legislation does protect agricultural operators from incurring liability in nuisance suits, producers are protected only if they operate within the defined parameters of the regulation. To some extent, then, the question of what agricultural activities fall within the vague contours of a protected ‘normal farm practice’, as it is termed in Ontario, is avoided.⁴⁴

⁴³ At the time of writing the Ontario Ministry of Agriculture, Food and Rural Affairs has stated that it will be developing new legislation governing the regulation of agricultural affairs.

⁴⁴ It is important to note however that in some instances the language of ‘normal farm practice’ can offer greater environmental protection. Because immunity will *always* be granted where there is regulatory compliance, relief

Notwithstanding these positive aspects of the legislation there are clearly several areas in which current legislation needs to be improved. Below follows a discussion of potential improvements that may be made.

1. The Recognition of Intensive Factory Farms

The *Agricultural Pollution Regulation* includes provisions that, in certain circumstances, appear to have the effect of limiting the size of some agricultural operations. The legislation clearly states, for example, that in ‘protected zones’ the maximum number of livestock units cannot exceed 200 or 250, depending on the manure management system. Similarly, the limits and conditions imposed on the spreading of livestock waste might also serve to restrict the size and density levels of a livestock operation.⁴⁵ However, notably absent from the Quebec legislation is any distinction between smaller family farms, and intensive commercial operations. From an environmental protection standpoint, it is crucial such a distinction be recognized, and large-scale operations be subject to appropriate legislative standards.

Throughout Quebec and Ontario there have been calls for a moratorium on the development of large-scale livestock operations until their potential environmental impact can be properly assessed. Given the severity of harm and environmental degradation which may be caused by large-scale livestock operations this is a reasonable and prudent course of action. If Quebec is serious in its commitment to protect the public welfare and the environment then a moratorium on intensive operations is necessary.

Should such a proposal prove to be unrealizable then, minimally, it is imperative that the Quebec legislation recognize the difference between small livestock operations and large or intensive livestock operations. To do this, one might consider categorizing the latter as industry, but this new classification might be less effective in Quebec than in other jurisdictions. This is

will be denied in cases where the nuisance is of an “abnormal and exorbitant character” so long as the activities are conducted in accordance with regulatory standards. See, L. Giroux “The Civil Law and the Environment”, in E. Hughes *et al.* eds., *Environmental Law and Policy*, (Toronto: E. Montgomery Publications Ltd., 1998)

because in Quebec, agricultural activities, like all other forms of industry, are subject to the provisions of the *Environment Quality Act*. Agricultural activities are not exempt from the general provisions of the provincial environmental protection act as they are, for example, in Ontario⁴⁶. There is thus no obvious benefit in classifying such operations as ‘industry’.

As an alternative to terming these larger farms as industry, the following is offered in the recent proposals from the Task Force on Intensive Agricultural Operations in Rural Ontario (“the “Galt–Barrett Report”).⁴⁷ The report acknowledges that ‘categories of agricultural operations’ requiring different levels of approval should be developed. While not all groups would agree on the boundaries of the categories, the proposed scheme nonetheless provides a useful starting point. The Quebec legislation might be amended to recognize the following categories:

- Category 1: less than 150 livestock units
- Category 2: 150-450 livestock units
- Category 3: 450-1000/2000 livestock units⁴⁸

While the Galt-Barrett report does not recognize a cap or upper limit on the number of livestock units that should be allowed, some upper limit is clearly necessary. This is so because ultimately, these very large “farms” simply cease to be farms in any real sense of the word. They undoubtedly become industrial operations and lose any connection to an ‘agricultural practice’ as we have known it. Further, without a cap, municipalities will continue to be threatened by the pollution from enormous operations, defeating the purpose of the existing protective measures and thwarting efforts to preserve traditional agricultural lands and practices. Once a category of a relatively larger operation is recognized, the legislation would then need to be amended to create stricter standards of review and inspection for these larger operations.

⁴⁵ It is important to recall however that the legislation also creates “limited activity zones” where waste may be spread even though the areas necessary for the spreading of livestock waste produced by an operation are insufficient taking into account the ratios fixed in the legislation.

⁴⁶ See e.g., *Environmental Protection Act*, R.S.O. 1990, c. E.19, ss. 13-15.

⁴⁷ “*Task Force on Intensive Agricultural Operations in Rural Ontario*”, The Ministry of Agriculture, Food and Rural Affairs, Summer 2000.

⁴⁸ Whether a category legitimizing operations of this size should be allowed is questionable. One Quebec group, for example, has demanded that all agricultural operations be limited to 40 livestock units. If however, governments

2. Scope of the Protection of the Preservation of Agricultural Lands Act

The scope of operations protected by the *Preservation of Agricultural Lands Act* is another problematic aspect of the Quebec legislation. The Quebec right to farm statute defines “agricultural activities” more broadly than other jurisdictions.⁴⁹ The term includes the “cultivation of the soil and plants, leaving of land uncropped, using it for forestry purposes, the raising of livestock and the construction of works or structures ...for these purposes”. This term also encompasses, and thus and accords protection, to all activities “relating to the storage, packaging, processing and sale of farm products”.⁵⁰ There can be no doubt that meat processing and packaging facilities can be a source of considerable nuisance to surrounding neighbours and cannot seriously be considered an agricultural practice at all. Meat processing and packaging is a part of agribusiness and should be considered as industry. It is clearly a weakness in the legislation that protection from nuisance liability should be extended to abattoirs and meat processing plants under the guise that they are ‘agricultural activities’. While an examination of the environmental threats posed by such operations is beyond the scope of the current discussion, it suffices to say that the definition of “agricultural activities” should be narrowed to ensure the exclusion of such practices.

3. Exceptions and Amendments

While legislating province-wide standards governing manure storage and handling as well as the construction of agricultural facilities is certainly a positive development towards greater environmental protection, it is nonetheless important to recall that there are several provisions exempting producers from compliance with these standards. In some instances, the operation of “smaller” farms need not be in accordance with the provisions of the Act. For

refuse to limit operations to smaller sizes, then at the very least they should be recognized in the legislation and subject to much stricter operating standards.

⁴⁹ Kalmakoff, supra, note 21, at 239. See also, L. Giroux, “On s’en va le droit québécois de l’environnement?” in *Développements récents en droit de l’environnement* (1997), Barreau du Québec, Formation permanente, vol. 90 (Cowansville: Les Éditions Yvon Blais, 1997), 381, at 440-49).

example, livestock operations with less than 40 livestock units may spread waste without preparing an AEFPP, provided some other conditions are met.⁵¹ Operations with less than 35 cattle or horses, or with 5 or less hogs, need not comply with the building standard requiring waste storage facilities be water-tight, as long as operators observe the minimum distances prescribed in the regulation.⁵² As mentioned above, even smaller agricultural operations can be a source of pollution. Arguably, for this reason, all agricultural operations should be made to comply with the spreading limits and building standards as operations.

Some agricultural operations may also be exempt from compliance with the regulation if their facilities were in operation prior to 1981 or to 1997, depending on the provision.⁵³ This would seem to be a significant loophole in the legislation in so far that many agricultural facilities are allowed to operate despite posing a significant risk of contaminating the surrounding environment. It is recognized that in many cases compliance with the regulation would involve rebuilding or renovating existing facilities at considerable cost. Nonetheless, given the dangers posed by agricultural pollution, it would seem reasonable that, eventually, *all* agricultural facilities be compelled to operate in accordance with standards designed to ensure the protection of the environment.

Since its enactment the Regulation has been amended twice, in June 1998 and in April 1999. On their face, some amendments appear to be strengthening the Regulation. In April 1999, for example, new phosphorus standards and regulations for beef cattle manure storage were introduced. However, the government failed to introduce similar standards for hog manure, much to the concern of local residents and environmental groups.⁵⁴ Other amendments have clearly relaxed some of the Regulation's standards or have extended the date by which operators must be in compliance.⁵⁵ Although these extensions may be reasonable, all parties concerned about the

⁵⁰ *Preservation of Agricultural Land Act*, *supra*, note 14, s.1

⁵¹ *Agricultural Pollution Regulation*, *supra*, note 17, s.14.

⁵² *Ibid*, s. 44.

⁵³ *Ibid*, see for e.g. sections 30, 31, 39, 44, 50.

⁵⁴ See, Mouvement Vert Mauricie, "Propositions d'un modèle d'action cochon", Spring 2000.

⁵⁵ See in particular section 6 of the *Regulation to amend the Regulation respecting the reduction of pollution from agricultural sources*, (*Gazette Officielle du Québec*, June 17, 1998, Vol 130, No. 25,) which effects several changes to s.92, in terms of dates of compliance and the regulation of the spreading of livestock waste. See also sections 5 of

impact of agricultural pollution should be wary of the tenor of some of the proposed amendments.

In November of 1999, the Ministry of the Environment issued a notice of proposed amendments to standards currently in effect under the Regulation.⁵⁶ The stated purpose of such amendments would be to allow farm producers more leeway to implement innovative solutions to manure management. It is noted that the storage of manure in watertight facilities comprised “constraints and costs that could be avoided by other management methods” and that other solutions to manure storage may be considered. The notice does add however, that novel solutions to manure treatment would have to be proven to be ‘environmentally sound’ before they could be brought into use. What constitutes an environmentally sound practice is not defined.

Proposed changes to the regulation also include provisions that would ‘ease the standards governing the protected zones for wells and the aquatic environment ...’ provided that livestock facilities built more closely to waterways remain ‘watertight’. This should be cause for alarm. The danger that so-called ‘watertight’ facilities will leak always exists, especially given that the legislation does not require independent inspection of all manure storage facilities (discussed below). Relaxing the standards would clearly seem to increase the risk of contamination of waterways and the surrounding environment.

4. Public Participation and Dispute Resolution

Another facet of the legislation that needs to be improved is the degree to which public participation in environmental assessments and disputes is permitted.

As discussed above, there is very little room for public involvement in the creation of ‘agricultural zones’. The *Agricultural Land Protection Act*, clearly gives the Ministry or the Commission the power to designate any area an ‘agricultural zone’. Although the Act allows

the *Regulation to amend the [Agricultural Pollution Regulation]*, Gazette Officielle du Québec, April 7, 1999, Vol 131, No. 14, which amends section 17 and provides that in certain circumstances the quantity of phosphorus may exceed the annual maximum.

‘public representations’ to be heard, ultimately, the Commission may decree an area to be an agricultural zone regardless of public objections and concerns.⁵⁷ Similarly, while it is possible for a municipality to review the agricultural zone plan, it is the Commission (which it is important to recall, is *required* under the Act to “give proper consideration to the fact that it is in the general interest to preserve agricultural land and agricultural activities in the exercise of its jurisdiction”)⁵⁸ which has the final say in the revised plan – even in the absence of an agreement with the municipality.⁵⁹ Under the provisions of the Act, rural residents have little power to control whether their area is deemed an ‘agricultural zone’. This is critical given that when an area receives such a designation the right to bring a private action in nuisance is eliminated.

5. Administration of the *Preservation of Agricultural Land Act*

In Quebec, the *Preservation of Agricultural Land Act* is within the jurisdiction of the court. This is to be contrasted with most other Canadian jurisdictions where right to farm legislation establishes administrative bodies with powers to inquire into and resolve agricultural nuisance disputes.⁶⁰

While the extent to which these boards are able (or willing) to protect rural environments is debatable, there are nonetheless advantages to the development of some form of tribunal to resolve nuisance disputes between agricultural operations and local residents. As is well known, the cost of bringing an action before a court can be prohibitive. High costs, coupled with lengthy delays in court proceedings and unpredictable results will likely discourage many individuals from initiating private actions. Moreover, a large commercial operation would likely have greater resources to expend in protracted litigation than would a few local residents.

It may be concluded that private litigation, as is contemplated by the Quebec legislation, creates a barrier to resolving disputes and is ultimately a poor approach to ensuring the

⁵⁶ Gazette Officielle du Québec, November 17, 1999. vol 131, no.47

⁵⁷ *Preservation of Agricultural Land Act*, *supra*, note 14, s. 48

⁵⁸ *Ibid*, s.12

⁵⁹ *Ibid*, s. 69.1-69.4

⁶⁰ Kalmakoff, *supra*, note 21.

protection of the environment. A more realistic way to address the concerns of inhabitants affected by agricultural pollution would be to create an impartial board,⁶¹ with the power to fully investigate and review complaints.

6. Environmental Assessment

Lacking from the Quebec legislation are provisions requiring that a full environmental assessment be conducted prior to the construction or enlargement of an agricultural facility. As discussed above, agricultural producers must obtain a certificate of authorization from the Ministry of the Environment before they can construct or alter a livestock facility. To do so, an agricultural operator is required to submit for review a detailed description of the proposed undertaking, including engineering plans, soil composition and all hydrogeological features, as well as a comprehensive plan for manure management and storage. The Minister can demand changes or alterations to the plan before issuing a certificate. While the application process for such a certificate appears reasonably rigorous, it should not be viewed as an effective substitute for an environmental assessment.

Section 31.1 of the *Environment Quality Act* sets forth the steps and requirements of an environmental impact assessment. It is significant, then, that the *Agricultural Pollution Regulation* seeks to apply only those sections of the Act dealing with ‘certificates of authorization’ (s. 22 and s.24) and does not make reference to those provisions addressing environmental assessment. The issuance of a certificate of authorization is clearly distinguished from an environmental assessment in the legislation.

An environmental impact assessment more strictly reviews the proposed project. Section 31.1 requires that any individual wishing to undertake a project, must prepare, in addition to an application for a certificate of authorization, an environmental impact assessment statement. The

⁶¹ As noted above, under the *Land Planning Act* establishes Agricultural Advisory Committees within each municipality (s.148). However, these bodies are consultative only and do not create a dispute resolution process for agricultural operators and individuals. It should also be noted that the *Preservation of Agricultural Land Act* does provide for a mediation process to assist in settling cases where a farm claims that its activities or development are

Minister is required to make this statement public. Any interested party may apply to the Minister for the holding of a public hearing in connection with the proposed project. Thus, the environmental assessment provisions in the *Environment Quality Act* create a means whereby interested parties have an opportunity to participate in decisions affecting the environment of their locality.

The *Agricultural Pollution Regulation* should be amended to ensure that larger operations⁶² comply not only with ss. 22 and 24 of the *Environment Quality Act*, but also with all the environmental assessment provisions of the Act. In addition, it would be worthwhile to consider legislation that would allow any person or group of persons who had been granted standing in an environmental assessment hearing to apply for financial assistance for the hearing.⁶³ This would guarantee that the public interest is adequately represented.

7. Surveillance and Enforcement

While the *Environment Quality Act* and the *Agricultural Pollution Regulation* contain many features designed to protect the environment from agricultural and livestock pollution, such measures are useless if they are not enforced. As will be discussed below, the current situation in Quebec reveals that surveillance and enforcement has in fact been dismal. Examined first, however, are the enforcement provisions as they appear on paper.

As discussed, the *Preservation of Agricultural Land Act* protects agricultural operations in designated zones from nuisance liability provided that all practices are in accordance with the *Environment Quality Act* and the *Agricultural Pollution Regulation*. Given that there are no explicit exemptions for agricultural operations, the following sections of the *Environment*

constrained by a municipal by-law, however this process is triggered by a complaint from an agricultural operation. (ss. 79.3-79.16)

⁶² If a scheme which categorized operations according to size were to be adopted, the legislation could be amended such that all operations falling within categories 2 and 3 had to undergo a full environmental assessment.

⁶³ See e.g., the *Ontario Intervenor Funding Project Act*, 1988.

Quality Act may be invoked if an agricultural operation contravenes any provisions of the Act or the Regulation:

s.19.2 A judge of the Superior Court may grant an injunction to prohibit any act or operation which interfered or might interfere with [the right to a healthy environment and to its protection...to the extent provided for by this Act and regulations, orders and authorizations issued under any section of this Act]

s.19.3 The application for an injunction contemplated in section 19.2 may be made by any natural person domiciled in Quebec frequenting a place of the immediate vicinity of a place in respect of which a contravention is alleged. It may also be made by the Attorney General and by any municipality in whose territory the contravention is being or about to be committed.

s.117 If a person believes that he can attribute to the presence of a contaminant in the environment or to the emission, deposit, issuance or discharge of a contaminant, impairment to his health or damage to his property, he may within thirty days after ascertaining the damage request the Minister to make an inquiry.

The above sections are only relevant to obvious infractions of the *Environment Quality Act* or *Agricultural Pollution Regulation*.

In terms of surveillance and enforcement mechanisms within the Regulation, the provisions surrounding AEFPs and certificates of authorization are considered. The legislation does include some third-party review of AEFPs (the equivalent of nutrient management plans), insofar as they must be approved by a certified agrologist. However, the legislation also offers ways around this requirement. The *Agricultural Pollution Regulation* does allow for a significant degree of self-regulation, as the AAFP may also be prepared farm producers, provided that they have been certified as having taken a training course authorized by the Ministry of the Environment. It is likely that large operations could easily afford to train or to hire an individual to prepare AEFPs that are especially sensitive to the interests of the commercial operation.

Although the preparation and approval of AEFPs as well as manure spreading and transportation registers is mandatory under the regulation, the enforcement of these provisions is largely informal. The Regulation states that all required documents may be inspected at any time at the discretion of the Minister. Random checks, however, are less effective than the regular monitoring of the activities of large operations.

The issuance of certificates of authorization by the Ministry of the Environment provides one route by which officials have a small degree of control over the operations of an agricultural operation. Before a certificate of authorization can be issued, officials at the Ministry ensure that (on paper) minimum distance separations from watercourses and non-agricultural structures are observed, that building codes are in accordance with the regulations and that the projected volume of livestock waste and the quantity of nutrients (phosphorus and nitrogen) is within acceptable levels. The following provisions of the *Environment Quality Act* describe the existing enforcement measures regarding certificates of authorization:

s.118.5(a) The minister shall keep a register of all applications for authorization certificates... submitted under section 22,... the information contained in the register is public information.

s. 122.1 The Government of the Minister may amend or cancel any authorization certificate issued... in its name in the cases where

- (a) the authorization certificate has been issued on the basis of erroneous or fraudulent information;
- (b) the holder of the authorization certificate does not comply with this Act or a regulation thereunder; ...

Section 118.5 of the Act suggests that there is some degree of transparency involved in the issuance process. Municipalities and private individuals would have access to and be able to study the building plans and specifications of the proposed construction of a large operation. The problem remains, however, that should the proposed project meet the requirements and conditions set forth in the *Environment Quality Act* and the *Agricultural Pollution Regulation* interested parties can do very little to alter or arrest the operation of that facility.

What is missing from the legislation and in practice is a commitment on the part of the Ministry of the Environment to regularly monitor and inspect the activities of agricultural operations. While it is encouraging, for example, that the Ministry reviews the building and engineering plans of facilities prior to their construction, it is of equal importance that these facilities be inspected to ensure compliance with the Regulation *after* construction is complete. Periodic examinations of written documents is an inadequate means of enforcing the requirements of the legislation. Building standards, manure handling and storage practices, water

consumption, pesticide use, chemical-fertilizer use and drainage should all be regularly assessed in order prevent damage to the surrounding environment. Unquestionably this will require the Ministry of the Environment to increase its staff and the amount of resources it expends on inspection.

With respect to penalties, although the government emphasizes that any infraction against the provisions of the regulation by a legal person can lead to fines of up to \$500,000 it should be observed that the minimum fine can be as low as \$1,000 for a first offence. It is unlikely that such a low penalty would serve as a significant deterrent for any large corporation running an intensive or large scale farming operation. The legislation should be amended to include significantly higher penalties for large agricultural operations that violate provisions of the Regulation.

Recent press releases indicate that the enforcement environmental standards and the monitoring of agricultural operations in Quebec have been either virtually absent or ineffective. In the winter of 1999, the Commission for Environmental Co-operation (CEC), associated with NAFTA, recommended that a full investigation into allegations ‘that Quebec is lax in enforcing regulations intended to prevent water pollution from industrial hog operations’.⁶⁴ It has been estimated that every year more than 9 million cubic meters of manure is stored in facilities that do not meet regulations. This is particularly worrisome given that it has also been estimated that the farm land available near livestock operations has the capacity to absorb only 3.6 cubic meters of animal waste annually.⁶⁵ Residents of Quebec should also be troubled by the findings of an investigative commission, reported in June of this year, that one in five hogs, one in four hogs in some areas, were being raised illegally.⁶⁶ The study found that 22% or nearly 5,000 livestock units from a total of 23,000 were being produced without any authorization. Quebec residents have rightly argued that these infractions are unacceptable. Clearly, significant improvements must be made at the level of enforcement.

⁶⁴ The Globe and Mail, December 4, 1999.

⁶⁵ *Ibid.*

⁶⁶ Francoeur, L.-G., “Un porc sur cinq est produit au noir au Québec”, *Le Devoir*, le 19 juin, 2000.

One way of alleviating some of the financial burden of regular inspection, monitoring and reporting on the Ministry is to require the operations themselves to regularly monitor and report on their activities. An example of this already exists in Ontario, where the government has required several hundred industries to monitor and report on contaminant loadings into water pursuant to the Municipal Industrial Sewage Abatement regulations.⁶⁷ This combined with random but frequent spot checks may provide one solution to the problem of needing significant financial resources to properly enforce the standards, and would require the polluting entity to internalize more of the costs of its polluting activities. Ultimately, however, it is incumbent on the province to regulate and enforce these activities effectively, and if it is serious in its commitment to preserving the environment, as well as sustaining safe agricultural practices, then the adoption of better monitoring and reporting measures is necessary.

CONCLUSIONS

This brief review of Quebec's agricultural and environmental legislation as it pertains to intensive livestock operations reveals that some progress has been made. Although there appears to have been a serious attempt to confront some of the realities of agricultural pollution, there remain considerable weaknesses in the legislation.

Distinctly lacking from the existing legislation is comprehensive or well designed approach to regulating intensive livestock operations. There is no recognition of the difference between smaller family operations and large-scale intensive operations. Provisions addressing this distinction need to be incorporated into the legislation. Furthermore, the scope of protections offered by Quebec's right to farm legislation are too expansive and should be narrowed. There must also be increased accountability to the public for environmental assessments and greater public participation in such assessments. Municipalities should be given

⁶⁷ The Petroleum sector monitoring and reporting requirements came into force in December, 1993. O. Reg. 537/93, s. 36(2). For the mining, industrial minerals and metal casting sectors, the monitoring and reporting requirements came into force in November, 1994. O. Reg. 560/94, s. 40(b), O. Reg. 561/94, s. 39(2), and O. Reg. 562/94, s. 38(2),

greater powers to regulate agricultural operations in their locality. The addition of an alternative mechanism to settle disputes between local residents and agricultural operators, outside of the courts, should be developed in order to better address the needs of local residents. Finally, and perhaps most importantly, a rigorous monitoring and enforcement system is necessary to ensure agricultural operators comply with all the standards established in the legislation. As a result, until weaknesses in legislation and enforcement can be addressed properly, it is suggested that the best environmental solution at this time is simply to place a moratorium on further development of intensive livestock operations and to better regulate and monitor existing facilities.

It is acknowledged that the changes to the legislation proposed in this discussion entail greater expenditure by the province. These recommendations are nonetheless entirely reasonable given the dangers posed by intensive agricultural operations. The protection of human health and the environment must be a priority over the perceived economic benefits of intensive livestock operations. . Events such as the one that occurred in Walkerton can only be expected to increase with the rise in intensive livestock operations and the concomitant risks they bring. As a result, pollution from intensive livestock operations is a problem that Quebec ignores at its citizens' peril.

respectively. For the pulp and paper sector, the monitoring and reporting requirements came into effect as of February, 1994. O. Reg. 760.760/93, s. 40(3).