



May 28, 2020

Great Lakes Water Quality Board
International Joint Commission / Commission mixte internationale
Great Lakes Regional Office / Bureau regional des Grands Lacs
100 Ouellette Ave, 8th Floor, Windsor, ON N9A 6T3
PO Box 32869, Detroit, MI 48232

Dear Board Members,

Re: A Response to the Document: Oversight of Animal Feeding Operations for Manure Management in the Great Lakes Basin

On behalf of the 1,180 farmers who market 5.5 million hogs in the province of Ontario, Ontario Pork is providing input on several of the recommendations found in the Great Lakes Water Quality Board Report on Manure Management. We are providing these comments in lieu of completing the anonymous survey that was sent out after the April 15, 2020 webinar. We would also like to state that we believe that the report is targeted to U.S. audiences; given this, not everything is applicable to Ontario, nor can every recommendation be viewed from an Ontario perspective.

As the voice of Ontario's pork industry, Ontario Pork is engaged in many areas, including research, government representation, environmental issues, consumer education and food quality assurance. Ontario Pork is the first livestock commodity group in the province to set social responsibility benchmarks, demonstrating pork producers' commitment to sustainable farming. Ontario's pork industry "farm to fork" generates \$2.6 billion in economic output and 13,186 in full-time equivalent jobs.

The pork industry is proactive in the use of environmentally friendly farming practices; healthy soils and clean water are vital to pork producers, to the communities in which they live and work, and to the business of farming. Preserving these resources is in the best interests of farmers today and in the future. Ontario Pork partners with, and contributes to, industry initiatives to improve nutrient stewardship, including the Timing Matters Peer-to-Peer initiative to reduce manure spreading at high-risk times; and the Thames River Collaborative which evaluates technologies for their effectiveness to reduce nutrient runoff losses from farmland.

Ontario Pork has made a focused effort to promote nutrient management planning and better use of water supplies. Along with six other commodity groups, Ontario Pork helped to create the Environmental Collaboration Ontario (ECO-Ag), a collaboration of agriculture organizations that recognize the need to work together on protecting the environment, and jointly advocate for practical effective solutions. This work includes collaboration with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), to champion best practices, as well as with the

Ministry of the Environment, Conservation and Parks (MECP) to promote and consult on issues impacting the agri-food sectors.

Made in Ontario Environment Plan

The Made-in-Ontario Environment Plan includes a commitment to reduce harmful algal blooms in Lake Erie and continue to support the Canada-Ontario Lake Erie Action Plan (CO-LEAP). This plan includes more than 120 actions to reduce phosphorus loadings and algal blooms, and was developed through extensive consultation in partnership with governments of Ontario and Canada, along with a host of other stakeholders.

Ontario's Goal

We have a clear goal to reduce phosphorus loadings to the western and central basins of Lake Erie by 40 per cent by 2025 – a target set under Ontario's Great Lakes Protection Act to address algal blooms. The Lake Erie Action Plan serves as Ontario's plan to achieve this target.

The following provides Ontario Pork comments regarding several of the Report's recommendations.

Report Recommendation 1: Subsection 1.1 and 1.2

From the report:

The most comprehensive requirements of all the jurisdictions studied, surrounding compliance, monitoring and enforcement were observed in Ontario. Ontario has a straightforward nutrient unit requirement for each type of animal and a corresponding amount of acreage that is dedicated for manure application for each permitted facility. Compliance with permitting requirements is verified by random inspections and complaint-triggered inspections. The Ontario Ministry of the Environment, Conservation and Parks has a range of enforcement actions at their disposal based on the severity of the infraction, ranging from orders to cease and/or clean up the activity, to fines and jail time. The participation of the Ontario Ministry of Agriculture, Food and Rural Affairs may be sought to mediate nuisance issues.

In Ontario, if a nutrient management plan is not required, applicants are required to show the destination and area of land receiving manure in a nutrient management strategy and a reasonable land base is required to be available for the number of nutrient units generated on the farm unit.

Nutrient Management Plans (NMP)

In Ontario, all operations of over 300 nutrient units (1,800 finished pigs or 990 sows with litters) are required to produce a nutrient management plan which matches manure production to the operations land base.

Nutrient units are calculated based on the number of livestock housed on a farm unit. A nutrient unit is defined as the number of animals that will give the fertilizer replacement value of the lower of; 43 kilograms of nitrogen or 55 kilograms of phosphate per year as nutrients.

Plans must be prepared by a farmer who has received training, or by a certified nutrient management consultant. All NMPs must be reviewed and updated annually and renewed every five years to reflect current circumstances on the farm.

NMP's are subject to random audits by the Ministry of Environment Conservation and Parks.

Nutrient Management Strategy (NMS)

In Ontario, any farm of over of 5 nutrient units that is new or expanding and has a manure storage must submit a NMS. A NMS details where the farm is located, how many livestock to be housed, type of manure produced and the amount and where manure will be applied etc.

Environmental Farm Plan

In Ontario, the Environmental Farm Plan (EFP) is currently a “voluntary education and awareness program designed to help farmers prepare confidential and self-administered environmental risk assessments for their farms. Action plans are then developed to deal with the identified concerns. On-farm environmental stewardship is a process of continuous improvement. It takes into account differences of natural landscape, location, farm types and farm management practice.

Reducing the pork sector's footprint remains a top priority and Ontario Pork is buoyed by the fact that more than 80% of producers have completed an Environmental Farm Plan (EFP), with half of them having done so in the last five years.

Report Recommendation 2:

Subsection 2.1

In Ontario, all operations of over 300 nutrient units (1,800 finished pigs or 990 sows with litters) are required to produce a nutrient management plan (as above) which matches manure production to the operations land base.

Subsection 2.2:

Ontario Pork does not support a land-based registry and believes that it is unnecessary. Each farmer in Ontario must list all acreage associated with their operation along with property identifiers on their nutrient management plans.

Subsection 2.3

Ontario has rules around application of manure on frozen ground. For farms required to have a NMP, there are regulatory requirements to be followed for winter application The Nutrient Management Act, 2002, with its regulation O. Reg. 267/03 (Regulation) addresses two time periods that may or may not overlap. The first is based on calendar dates - December 1 to March 31 or "winter"; however, we have found that given the inconsistent winter weather, these dates sometimes require adjustment. The second period is any other time when the soil is frozen or snow-covered. Frozen soil is any 5 cm layer of frozen moisture in the top 15 cm of soil. Snow-covered soil is soil with a layer of snow on the surface with an average minimum depth of 5 cm.

Timing Matters

In the Timing Matters pilot, Ontario Pork has partnered with the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) to reduce phosphorus runoff into the Lake Erie Basin. This initiative focuses on the timing of manure application by creating awareness around the fact that there are high-risk and low-risk times to spread nutrients.

Ontario Pork is also partnering with other farm groups in the Thames River Phosphorus Reduction Collaborative. In this initiative, farmers are working with municipalities and conservation authorities to test practical methods for reducing the risk of phosphorus runoff from the edge of farm fields. The Collaborative is planning to assess a number of such methods,

which may be adopted by farms on both sides of the border, representing practical solutions to support the health of Lake Erie.

Manure Application BMP's

Manure application is carefully considered by producers with 70% of producers using techniques known to minimize odour and designed to keep nutrients in the soil for crop use, such as manure injection. Nearly the same percentage of producers incorporate manure within two days.

A number of producers have opted to apply manure in the spring just before planting or practice injecting manure inter row after the crop has emerged. We continue to see strong adoption of soil analysis – with 90% of producers having tested their soil over the past three years for their nutrient levels, although there is room for improvement when it comes to performing manure analysis on a more frequent basis to determine its nutrient content as a soil fertilizer. Total phosphorus arising from soil erosion, streambank erosion and similar sources contain much less soluble reactive phosphorus than phosphorus from sources such as human sewage, animal manure and fertilizers.

Soil and streambank erosion contribute mostly particulate phosphorus that is bound to and transported with soil. As much as 90 per cent of the total phosphorus load to a river can be delivered during storm events. This is especially evident during the spring runoff period, when soils are saturated and typically bare of vegetation.

Controlling these sources requires building soil health and streambank stability, increasing infiltration, and reducing movement of water over bare soils to keep as much water and soil as possible on-site. Most soil erosion and runoff in the Lake Erie basin occurs during snowmelt, winter rainfall and extreme storm events. Water flowing over bare soils can cause soil erosion as well as facilitate the loss of manure or fertilizer that was surface-applied in the fall, winter or early spring. Figure 2 demonstrates that the majority of phosphorus loadings occur outside the summer growing season.

Subsection 2.5 - Indigenous Communities

From the report:

Both Canada and the United States, at the federal level, have mandates to consult with Indigenous communities when the government's actions may affect tribal interests (United States), First Nations (Canada) or Indigenous Treaty rights.

Subsection 2.4 and 2.5.

Ontario Pork believes that notifying all property owners and residents within a certain radius of a facility seeking a permit for a new or expanding animal feeding operation is not necessary.

In Ontario, we use the Minimum Distance Formula. The Minimum Distance Separation (MDS) Formulae are land use planning tools that determine setback distances between livestock barns, manure storages or anaerobic digesters and surrounding land uses. The objective of MDS is to minimize land use conflicts and nuisance complaints related to odour.

Report Recommendation 3:

From the report:

The Environmental Farm Plan (started in 1992) is an example of a cost-share funding program. Funding over the years has been inconsistent and often temporary. The Environmental Farm Plan started with a maximum grant of CDN\$1,500 per farm then grew to CDN\$30,000 per farm before being severely restricted around 2011, and dedicated funding eliminated in 2013 so that since then farmers could still do an Environmental Farm Plan but had to compete for funding against farmers doing innovative projects in other areas of agriculture.

Ontario Pork believes that the Canadian (federal) and U.S. governments, along with Great Lakes states and the province of Ontario, should provide financial and technical support to implement high-impact, priority projects that serve to make better use of phosphorus for crop growth and help farmers to adopt state of the art manure management practices that work to reduce Great Lakes phosphorous loadings. This financial assistance should be designed to help promote the broad uptake and application of improved methods undertaken by farmers implementing changes to existing farms and existing good stewardship practices that benefit society. This financial assistance should include reuse and treatment technologies that demonstrate innovative approaches that will assist existing farms to make necessary changes to meet recommended standards and best management practices.

Ontario Pork appreciates the opportunity to provide input on the recommendations found in the Great Lakes Water Quality Board Report on Manure Management.

Sincerely,



Eric Schwindt
Board Chair