APPLICATION FOR REVIEW
Filed pursuant to Section 61 of the *Environmental Bill of Rights*
RE: *Nutrient Management Act, 2002* and *Environmental Protection Act*, *1990*

1. Applicants

1(c) Corporate Applicant Number One:

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Declaration of Incorporation in Ontario:

AEL Advocacy is a Canadian Federal Corporation, carrying on business with its head office in Ontario established by articles of incorporation in October 2021.

April 24, 2025	Kira Berkeley, Co-Director and Counsel
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Declaration of Incorporation in Ontario:

World Animal Protection Canada is a Canadian Federal Corporation, carrying on business with its head office in Ontario established by articles of incorporation in September 1980.

April 24, 2025	Colin Saravanamuttoo, Executive Director
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2. Subject Matter of Requested Review

2(a) The Applicants hereby request a review of the following existing Acts, namely:

- *Nutrient Management Act, 2002*, S.O. 2002, c.4 (the "***NMA***"); and
- *Environmental Protection Act*, 1990, R.S.O. c. E.19 (the "***EPA***").

Pursuant to subsection 61(1) of the *Environmental Bill of Rights* (the "***EBR***"), an application for review may be filed where the Applicants believe that a provincial Act or regulation "should be amended, repealed or revoked in order to protect the environment." The *NMA* and the *EPA*, administered by the Ministry of Agriculture, Food and Agribusiness ("**OMAFA**") and the Ministry of the Environment, Conservation, and Parks ("**MECP**") (together, the "**Ministries**"), are expressly prescribed by regulation as subject to review under Part IV of the *EBR*.[1]

For the reasons set out below, the Applicants submit that a review and revision of the current legal framework governing nutrient management and environmental protection is in the public interest, particularly in relation to animal agriculture in Ontario. The existing regulatory framework is inadequate to address the growing expansion of intensive livestock operations ("**ILOs**"), which are a major source of environmental harm. Ontario's current regime under the *NMA* and the *EPA* fails to provide sufficient oversight, accountability, and enforcement mechanisms to:

- Prevent and mitigate the contamination of soil, waterways, and groundwater from nutrient runoff, manure storage, and agricultural waste.
- Limit harmful air emissions, including methane ("**CH_4**") and ammonia ("**NH_3**"), which contribute to climate change and poor air quality.
- Ensure meaningful accountability and compliance from large-scale industrial farming operations.

2(b) In light of the significant environmental risks posed by current agricultural practices, the Applicants request a review of the need for new legislative and policy measures to:

- Strengthen pollution controls for air, water, and soil contamination linked to animal agriculture.
- Improve enforcement mechanisms to ensure compliance with environmental regulations in the animal agriculture sector.
- Align Ontario's agricultural policies with climate action goals and strategies for reducing emissions from animal agriculture.
- Limit the growth of large-scale ILOs.
- Encourage a transition toward humane, sustainable farming practices that prioritize environmental protection and ecosystem health.

[1] See O.Reg.73/94, sections 2, 3(1), 5, 6(1), and 7(1).

A revised legal framework must be comprehensive, enforceable, and capable of effectively addressing the environmental harms associated with industrial animal agriculture, including its role in air, land, and water pollution, greenhouse gas ("**GHG**") emissions, and ecosystem degradation.

Ontario stands at a critical juncture, where bold legislative and regulatory reforms are required to ensure that agriculture-related pollution and environmental degradation are effectively mitigated. The Applicants urge the Ministries to undertake a comprehensive review of the *NMA* and *EPA*, with a focus on establishing a unified, enforceable, and science-based legal framework that will support a more compassionate and sustainable agricultural future for Ontario.

3. Reasons Why the Requested Review Should be Undertaken

I. The Purpose of Application

The Applicants submit that the Ministries should undertake our review in order to protect the environment because Ontario's current environmental protection framework under the *NMA* and the *EPA* is insufficient to address the serious environmental and public health impacts of the industrial animal agriculture industry. While existing laws, such as the *NMA* and the *EPA*, are intended to safeguard the environment, they fail to adequately regulate industrial livestock operations ("**ILOs**"), leaving critical gaps that allow pollution to continue unchecked. These deficiencies pose severe threats to air, water, and land quality, as well as public health.

The current legislative framework relies on outdated and fragmented regulations that fail to address the full scope of environmental degradation caused by the animal agriculture industry. The regulatory exemptions and weak enforcement mechanisms within the *NMA* and *EPA* further exacerbate the problem. Nutrient runoff from animal waste, for instance, remains a major source of nitrogen and phosphorus pollution, yet the vast majority of farms, particularly ILOs, are not properly regulated or held accountable.[2] The Environmental Compliance Approval ("**ECA**") process under the *EPA* has also proven ineffective in curbing the industry's pollution.[3]

The Applicants urge the Ontario government to address these shortcomings by establishing a more comprehensive legislative framework that adequately regulates all environmental aspects of animal agriculture. The need for reform is clear—Ontario must replace the fragmented system with a robust, single governing statute that prioritizes the protection of ecosystems, public health, and animals. This new legislation must remove exemptions for the industry, enhance pollution controls, and align with Canada's emissions reduction targets, while promoting humane and sustainable farming practices.

Under section 67 of the *EBR*, the minister must review this application for review preliminarily to determine whether the **public interest** warrants the full review requested in this application. That section also provides a list of factors that the minister may use to aid their determination. Additional factors are set out where an application for review deals with an existing policy, as this one does. Those factors include:

A. the ministry Statement of Environmental Values ("**SEV**");
B. the potential for harm to the environment if the review applied for is not undertaken;
C. the fact that matters sought to be reviewed are otherwise subject to periodic review;
D. any other matter that the minister considers relevant (section 67(2)(g));
E. the resources required to conduct the review.

The relevance of those factors to this Application is set out below.

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[2] Environmental Commissioner of Ontario, "2018 Environmental Protection Report, Back 2 Basics: Respecting the Publics Voice on the Environment" online (pdf): *2018 Environmental Protection Report,* <https://www.auditor.on.ca/en/content/reporttopics/envreports/env18/Back-to-Basics.pdf> at pp 6.
[3] *Ibid,* at 41.

II. The Public Interest Rationale for the Requested Review

A. The Ministry Statement of Environmental Values ("SEV")

In determining whether the public interest warrants the requested review, subsection 67(2)(a) of the *EBR* directs the Minister to consider the relevant Statement of Environmental Values ("**SEV**"). In this case, responsibility for addressing the environmental impacts of animal agriculture—particularly those associated with ILOs—is divided between two ministries: the Ministry of Agriculture, Food and Agribusiness ("**OMAFA**"), which administers the NMA, and the Ministry of the Environment, Conservation and Parks ("**MECP**"), which oversees the EPA. A comprehensive review of both Acts is needed to fulfill each ministry's SEV commitments and to uphold the public interest in environmental protection and sustainability.

OMAFA's SEV[4]

OMAFA's SEV affirms the Ministry's responsibility to:

- Prevent, reduce, and eliminate pollutants that pose an unreasonable threat to the environment;
- Protect and conserve natural resources, including animal life, plant life, and ecological systems;
- Promote the wise management of these natural resources; and
- Use evidence and risk-based approaches to inform policy, monitor performance, and shape regulation.

While OMAFA's core mandate includes promoting agricultural productivity and rural economic development, the SEV clearly affirms that these goals must be achieved in a way that protects the environment and supports long-term ecological resilience.

As outlined above, animal agriculture—particularly industrial and intensive farming practices—is a significant source of environmental degradation. The pollutants generated by ILOs, including harmful emissions, nutrient runoff, and waste byproducts, are directly relevant to OMAFA's SEV commitment to pollution prevention. A comprehensive review of the *NMA* and *EPA* would enable Ontario to more effectively address these impacts by strengthening oversight, closing regulatory gaps, and introducing enforcement mechanisms that hold industrial farms accountable for environmental harm.

In addition, OMAFA's commitment to conserving plant life, animal life, and ecosystems calls for a transition toward more humane and sustainable agricultural practices. The existing regulatory framework often permits practices that contribute to habitat loss, biodiversity decline, and ecosystem disruption. Reviewing the *NMA* and *EPA* presents an opportunity to incorporate standards that prioritize environmental protection, promote alternatives to animal agriculture, and reflect growing public demand for a more ethical, compassionate, and sustainable food

[4] Ministry of Agriculture, Food, and Rural Affairs, "Statement of Environmental Values" online: <https://ero.ontario.ca/page/sevs/statement-environmental-values-ministry-agriculture-food-and-rural-affairs>.

system—one capable of withstanding the escalating challenges of climate change.

The SEV's call for the "wise management of natural resources" is also central. Given the mounting scientific evidence on the environmental and ethical costs of industrial animal farming, maintaining the status quo is no longer tenable. A shift toward plant-based food production and more sustainable farming methods would ensure more responsible stewardship of Ontario's natural resources and help future-proof the province's agricultural sector.

In view of these considerations, the Applicants submit that a review of the *NMA* and *EPA* is not only warranted—it is essential to meeting OMAFA's environmental protection and sustainability commitments. Such a review would support a just and managed transition to a more humane and ecologically sound food system, positioning Ontario as a leader in both agricultural innovation and environmental stewardship.

A review of the *NMA* and *EPA* would provide the opportunity to:

- Modernize and strengthen oversight and enforcement mechanisms for nutrient and waste management;
- Reduce the cumulative environmental burden of ILOs on Ontario's ecosystems;
- Align agricultural policies with science-based, sustainable practices that prioritize both environmental health and animal protection.

The Applicants submit that this review is essential for realigning OMAFA's regulatory approach with its SEV and responding to the growing public demand for a food system that is sustainable, climate-resilient, and ethically sound.

MECP's SEV[5]

MECP's SEV outlines its vision of "an Ontario with clean and safe air, land and water that contributes to healthy communities, ecological protection, and environmentally sustainable development for present and future generations." This vision is directly relevant to the impacts of industrial animal farming and the Applicants' call for legislative reform.

The MECP's commitment to an ecosystem-based approach—including the consideration of cumulative effects, interdependence among land, water, and living organisms, and long-term consequences of today's decisions—demands a more integrated regulatory framework. The current legal regime allows harmful pollution and ecological degradation to persist under fragmented oversight. A review of the *NMA* and *EPA* would give the Ministry the opportunity to:

- Improve the effectiveness of environmental planning and pollution control;
- Hold polluters accountable through stronger enforcement and cost recovery mechanisms;
- Promote transparent and coordinated governance across ministries;

[5] Ministry of the Environment, Conservations and Parks, "Statement of Environmental Values : Ministry of the Environment and Climate Change" online: <https://ero.ontario.ca/page/sevs/statement-environmental-values-ministry-environment-and-climate-change>.

- Better protect Ontario's ecosystems and communities from the cumulative impacts of industrial farming.

Incorporating the proposals advanced in this submission would enhance the Ministry's ability to meet its SEV obligations and advance the broader public interest in ecological integrity, climate mitigation, and intergenerational justice.

In light of the ministries' SEV commitments and the significant environmental and public health risks posed by ILOs, the applicants submit that a review of the *NMA* and *EPA* is not only warranted but imperative. Such a review is in the public interest and is urgently needed to safeguard Ontario's environment for present and future generations.

B. The Potential for Harm to the Environment if the Review Applied for is not Undertaken

In accordance with subsection 67(2)(b) of the *EBR*, the Minister must consider the potential for harm to the environment if the requested review is not undertaken. The Applicants submit that the failure to review Ontario's regulatory framework for ILOs would result in significant and escalating harm to the province's environment, as well as public health, and animal welfare. A formal review is clearly in the public interest and urgently required to address the growing threats posed by these large-scale operations.

ILOs in Ontario are expanding in both size and number, while remaining largely unregulated under the current legal framework.[6] This growth has not been accompanied by corresponding safeguards, resulting in widespread pollution and increasing risks to human, animal, and environmental health. The *NMA* and *EPA* contain critical gaps, troubling exemptions, and ineffective enforcement mechanisms that fail to protect Ontario communities and ecosystems.

Without a comprehensive review, these legislative shortcomings will continue to expose the public to serious and avoidable harms, including toxic algal blooms, groundwater contamination, air pollution, zoonotic disease, and irreversible ecosystem degradation.

<u>Escalating Pollution of Soil, Water, and Air</u>

Animal agriculture, particularly through ILOs, is one of the largest contributors to environmental pollution in Ontario.[7] These operations generate large amounts of manure, fertilizers, and other agricultural waste, which, if not properly managed, lead to extensive contamination of soil,

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[6] See: https://www.aeladvocacy.ca/_files/ugd/c883e8_a881e24cba2a444b8a2f2ccedd78a03f.pdf; https://www.aeladvocacy.ca/_files/ugd/c883e8_c00a8a7d5ca44b8394c3b6f1c08e48dd.pdf

[7] Environment and Climate Change Canada, "Canada's Official Greenhouse Gas Inventory – EN GHG IPCC ON" last modified 2024-05-02, online: < https://data-donnees.az.ec.gc.ca/data/substances/monitor/canada-s-official-greenhouse-gas-inventory/A-IPCC-Sector/?lang=en>

waterways, and air.[8] Unfortunately, the current legal framework does not effectively regulate nutrient runoff, manure storage, and greenhouse gas emissions—resulting in significant environmental consequences.

Water contamination is one of the most pressing issues. Phosphorus and nitrogen from manure runoff fuel harmful algal blooms ("**HABs**") in Ontario's lakes and rivers, depleting oxygen and creating dead zones where aquatic life cannot survive. These blooms release toxins that contaminate drinking water, making it unsafe for both municipal and rural communities. Groundwater is also at risk, as nitrate contamination from ILO manure storage and application seeps into groundwater, threatening well water supplies. Lake Erie, for example, a critical water source for millions of people, regularly experiences HABs linked to agricultural runoff, emphasizing the need for stricter nutrient management regulations.[9]

The HABs blooms caused by nutrient runoff can deplete oxygen levels in the lake, killing fish and aquatic species. The blooms also produce toxins that threaten those who are exposed to them, sometimes causing liver damage and death.[10]

The volume of ILOs, particularly in southwestern Ontario, are a major contributor to nutrient runoff and its harm to the watershed. Regulatory measures to address this harm have been insufficient. Ontario's Lake Erie Domestic Action Plan has been criticized by both the Great Lakes Science Advisory Board and the Great Lakes Water Quality Board because the plan lacks clear implementation strategies.[11] As is a common theme in this application, there are few mandatory regulations to address these issues. Instead, the plan relies on education and outreach programs that encourage voluntary compliance.

Generally, data from provincial reports on pollution and water quality between 2018-2023 demonstrate many spills involving manure or agricultural byproducts have contaminated local water sources. This has led several municipal water systems to report adverse water quality test results year over year. Often, the contaminant was E. coli and microcystin—which are results of agricultural runoff.[12]

The potential harm to the environment also exists on the smaller scale of individual farms. This application has discussed the gaps in enforcement that are prominent under the current regime. Results from Statistics Canada's 2021 Census of Agriculture found that there are 48,346 farms in Ontario - 20,289 of those specifically involve animals.[13] Despite these numbers, analysis shows that only 6 violations of Ontario's various environmental legislation were committed by animal agricultural facilities between 2018-2024. In that time, 294 complaints were lodged, and 99

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[8] AEL Advocacy, "Green Laws, Grey Areas: A Study of Environmental Law Enforcement Gaps in Ontario's Animal Agricultural Sector" (November 2024), online (pdf): AEL Advocacy < https://www.aeladvocacy.ca/_files/ugd/c883e8_c00a8a7d5ca44b8394c3b6f1c08e48dd.pdf> at pp 4-5.
[9] *Supra*, note 2 at pp 19.
[10] *Supra* note 14 at pp 23.
[11] *Ibid* at pp 24.
[12] *Supra* note 2 at pp 17-18
[13] Zong Jia Chen, "Ontario is an agricultural powerhouse that leads in many farming categories" (June 15, 2022) online: <https://www150.statcan.gc.ca/n1/pub/96-325-x/2021001/article/00006-eng.htm>

inspections were conducted.[14] It is highly likely that a more robust investigation and enforcement scheme would reveal a higher rate of non-compliance.

An example of penalties imposed under the current regime show their toothless nature and inability to effectively address the underlying harm caused by offenders. Consider a dairy farm which caused significant environmental damage when a broken valve on a cattle waterer resulted in the unlawful release of liquid manure into a creek. The spill killed several fish and impaired water quality. This incident was a Category III violation under the existing regulations.[15]

The offending farm was fined $62,500, inclusive of a victim surcharge. No other orders were imposed to ensure preventative measures were taken to avoid similar incidents in the future.[16] This type of penalty is part of a pattern under the current legislative regime that does not address the root causes of harm to the environment. As it stands, the imposition of fines alone essentially represents the ability for non-compliant farms to buy their way out of compliance with environmental protections.

ILOs also contribute to air pollution and climate change. These operations are a major source of methane ("**CH_4**") and nitrous oxide ("**N_2O**"), two of the most potent greenhouse gases.[17] Additionally, the large-scale storage and application of manure release ammonia ("**NH_3**"), which contributes to acid rain, soil degradation, and respiratory illnesses.[18] The fine particulate matter (PM2.5) from ammonia and methane emissions exacerbates asthma, lung disease, and other respiratory conditions in nearby communities.[19]

Soil degradation and habitat loss are further concerns tied to the expansion of industrial farming. Deforestation and habitat destruction occur as land is cleared for large-scale livestock operations, reducing biodiversity and weakening ecosystems against climate change.[20] Excessive manure application also overloads soil with nutrients, leading to long-term damage and reduced agricultural productivity.[21]

Public Health Risks

The environmental harm caused by ILOs has direct and severe consequences for public health. The failure to strengthen Ontario's regulatory framework will increase the risks associated with

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[14] *Supra* note 30, at 20.
[15] *Supra* note 14 at pp 21.
[16] *Ibid*.
[17] *Ibid* at pp 4.
[18] Jigyasa Prakash et al, "Global Trends of Acidity in Rainfall and Its Impact on Plants and Soil" (2023) 23: Journal of Science and Plant Nutrition <https://pmc.ncbi.nlm.nih.gov/articles/PMC9672585/pdf/42729_2022_Article_1051.pdf> at pp 399.
[19] Christine Loftus et al, "Ambient ammonia exposures in an agricultural community and pediatric asthma morbidity" (2015) 26:6 *Epidemiology* <https://pmc.ncbi.nlm.nih.gov/articles/PMC4587379/pdf/nihms708366.pdf> at pp 9.
[20] *Supra* note 14 at pp 4.
[21] Rattan Lal, "Restoring Soil Quality to Mitigate Soil Degradation" (2015) 7:5 Sustainability <https://www.mdpi.com/2071-1050/7/5/5875> at pp 5881.

contaminated water, disease outbreaks, antibiotic resistance, zoonotic diseases, cancer rates, and respiratory illnesses.[22]

For example, manure runoff from ILOs can carry harmful pathogens like E. coli and Salmonella, which contaminate drinking water and increase the risk of gastrointestinal diseases.[23] Toxic cyanotoxins from algal blooms are linked to serious health effects, including liver damage and neurological disorders.[24] Exposure to pesticides can suppress immune system function. This exposure can occur through consumption of plants and animals as food, consumption of contaminated drinking water, or through the accumulation of contamination at each stage of the food chain. Pesticide levels found in organisms are compounded as they are consumed by others. Given humanity's position at the apex of the food chain, they will ingest the highest accumulation of pesticide-related contaminants.[25]

Antibiotic overuse in livestock farming contributes to antibiotic-resistant bacteria, which threatens the effectiveness of medical treatments for human infections.[26] Prolonged low-dose antibiotic usage on animals can lead to the selection of antibiotic-resistant genes in new microbes like bacteria or fungi. Once those bacteria become prevalent, they can spread quickly. This is especially true in the overcrowded, unsanitary conditions of many ILOs. In these environments bacteria can travel on animals, food, and manure. Airborne transmission and transmission through physical contact are both possible for these forms of bacteria.[27] The conditions in ILOs also raise the likelihood of zoonotic diseases, such as avian and swine flu, which can spread to humans.[28]

ILOs also release high levels of airborne pollutants, including particulate matter, ammonia, and hydrogen sulfide, which are associated with chronic respiratory diseases, asthma, and cardiovascular conditions.[29] Farmworkers and their families are the first to bear the brunt of the health impacts of these pollutants.[30] Rural communities located near ILOs also experience disproportionately high rates of respiratory illnesses, especially in areas with limited healthcare

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[22] Leo Horrigan et al, "How Sustainable Agriculture Can Address the Environmental and Human Health Harms of Industrial Agriculture" (2002) 110:5 Environmental Health Perspectives <https://pmc.ncbi.nlm.nih.gov/articles/instance/1240832/pdf/ehp0110-000445.pdf > at pp 451;
Paul Leighton, "The Harms of Industrial Food Production: How Modern Agriculture, Livestock Rearing and Food Processing Contribute to Disease, Environmental Degradation and Worker Exploitation." in Pamela Davies, Paul Leighton and Tanya Wyatt, eds *The Palgrave Handbook of Social Harm*, 1st ed (Cham: Springer International Publishing, 2021) 199. <https://doi.org/10.1007/978-3-030-72408-5_9> at pp 205.
[23] Horrigan, *supra* note 28.
[24] Apurva Lad et al, "As We Drink and Breathe: Adverse Health Effects of Microcystins and Other Harmful Algal Bloom Toxins in the Liver, Gut, Lungs and Beyond" (2022) 12:3 Life <https://www.mdpi.com/2075-1729/12/3/418> at pp 3, 5.
[25] Horrigan, *supra* note 28 at 450-451.
[26] *Ibid* at pp 452.
[27] Leighton, *supra* note 22 at pp 209.
[28] Matthew N. Hayek, "The infectious disease trap of animal agriculture" (2022) 8:2 Science Advances <https://pmc.ncbi.nlm.nih.gov/articles/PMC9629715/pdf/sciadv.add6681.pdf> at pp 1.
[29] Tara M. Nordgren and Kristina L Bailey, "Pulmonary Health Effects of Agriculture" (2016) 22:2 Current Opinion in Pulmonary Medicine <https://pmc.ncbi.nlm.nih.gov/articles/PMC4764055/pdf/nihms-759817.pdf > at pp 2.
[30] Leighton, *supra* note 22 at pp 205.

access.[31] Chronic exposure to these airborne pollutants may increase the risk of developing various forms of cancer, including leukemia, lymphoma and lung cancer.[32]

Animal Welfare and Ecosystem Impacts

Animal welfare is also severely compromised in industrial-scale farming operations, which prioritize high-density production at the expense of animal well-being. Two of the most concerning examples are dairy cows and egg-laying hens. Today's dairy cows are selectively bred and managed to produce approximately four times more milk annually than cows did just 70 years ago. This unnatural level of production imposes intense physiological strain, often resulting in lameness, mastitis, and reproductive disorders. These cows are repeatedly impregnated and then separated from their calves shortly after birth—causing distress for both mother and offspring—so that milk can be harvested for human consumption.

Similarly, ILO hens have been bred to lay up to 250 or more eggs per year, compared to around 20 eggs annually for a wild hen. These birds are frequently confined to cramped, barren cages or overcrowded barns with minimal opportunities to engage in natural behaviours such as nesting, foraging, or dust-bathing. The result is a chronic state of stress, boredom, and physical deterioration—including feather loss, bone weakness, and increased susceptibility to disease.

Animals in ILOs endure an extremely sedentary and restricted existence. Overcrowding, confinement, and the routine use of physical alterations (e.g., debeaking, tail docking, or castration without pain relief) are common practices that inflict pain and inhibit normal behaviour.[33] These inhumane conditions not only raise serious ethical concerns but also create environments in which infectious diseases can thrive.[34] The constant proximity of animals, poor air quality, and accumulation of waste contribute to high levels of disease transmission—conditions that are exacerbated by stress, which impairs immune function.[35]

In addition, industrial agriculture harms wildlife by driving habitat destruction and species loss, as forests and wetlands are cleared to accommodate large-scale livestock operations.[36] Between 30-40% of the world's surface is now allocated to an agricultural system. This development has resulted in more homogenous landscapes that have less of a variety of resources to support native

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[31] Mariana Simoes et al, "Residential proximity to livestock animals and mortality from respiratory diseases in The Netherlands: A prospective census-based cohort study" (2022) 161: Environment International <https://www.sciencedirect.com/science/article/pii/S0160412022000666> at pp 6-7.
[32] Matthew Chidozie Ogwu et al, "Agricultural Air Pollution: Impacts, Sources, and Mitigation Strategies" in Sylvester Chibueze Izah, Matthew Chidozie Ogu and Shahsavani Abbas, eds *Air Pollutants in the Context of One Health: Fundamentals, Sources, and Impacts*, 1st ed Vol 134 39. (Cham: Springer, 2024) 395. <https://doi.org/10.1007/978-3-031-74165-4> at pp 411.
[33] *Ibid*.
[34] Jonathan Anomaly, "What's Wrong With Factory Farming?" (2014) 8:3 Public Health Ethics <https://pmc.ncbi.nlm.nih.gov/articles/PMC9757169/pdf/phe_8_3_246.pdf> at pp 246.
[35] Carsen H, Richter et al, "Intensified food production and correlated risks to human health in the Greater Mekong Subregion: a systematic review" (2015) 14:43 Environmental Health <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-015-0033-8> at pp 2.
[36] Jos T.A. Verhoeven and Tim L. Setter, "Agricultural use of wetlands: opportunities and limitations" (2010) 105: Annals of Botany <https://pmc.ncbi.nlm.nih.gov/articles/PMC2794053/pdf/mcp172.pdf > at pp 157.

animal life. This has caused an accompanying loss of biodiversity in affected regions.[37] Research suggests that as the global population increases, the demand for agricultural land will also rise. This trend will result in continued habitat loss and could lead to almost 90% of animal species losing over a quarter of their habitat by 2050.[38] The combination of biodiversity loss and pesticide and fertilizer runoff from feed crop production will continue to degrade ecosystems and threaten pollinators, fish, and other wildlife.[39]

Inadequate Regulation under the *Nutrient Management Act*

The *NMA* is Ontario's primary legislation for regulating the storage, transfer, and application of "nutrients", which include manure, fertilizers, compost, and non-agricultural source materials such as sewage biosolids. The Act was designed "to provide for the management of materials containing nutrients in ways that will enhance protection of the natural environment and provide a sustainable future for agricultural operations and rural development."[40] However, its limited scope and weak enforcement mechanisms have rendered it ineffective in mitigating pollution from ILOs.

1. Narrow Scope and Exemptions Leave Most ILOs Unregulated

The *NMA* requires only certain large or expanding livestock farms to develop a Nutrient Management Strategy ("**NMS**"), which addresses the generation, transfer, and storage of manure. The *NMA* also only requires large livestock farms to develop a Nutrient Management Plan ("**NMP**"), which deals with the actual application of manure and fertilizer to land. These requirements cover only a fraction of Ontario's livestock operations. According to a 2018 report by the Environmental Commissioner of Ontario:

> Only 6,513 farms out of 19,409 livestock operations in Ontario are required to prepare and follow a nutrient management strategy. Of those 6,513 farms, 1,303 large operations must also prepare and follow a nutrient management plan […]. Since smaller farms […] are not captured, these rules only catch about 34% of Ontario's livestock operations, 6% of the farms that spread manure, and 44% of Ontario's total manure by volume.[41]

This means that the majority of livestock farms—including many ILOs—are not required to follow any legally binding nutrient management standards to prevent environmental contamination.

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[37] *Supra* note 35 at pp 202-203.
[38] David Williams and Michael Clark, "Almost 90% of the world's animal species will lose some habitat to agriculture by 2050", *The Conversation* December 21, 2020, online: < https://theconversation.com/almost-90-of-the-worlds-animal-species-will-lose-some-habitat-to-agriculture-by-2050-152362>
[39] *Supra* note 43*;*
Adrian Fisher II et al, "Breaking the cycle: Reforming pesticide regulation to protect pollinators" (2023) Bioscience 73:11 <https://pmc.ncbi.nlm.nih.gov/articles/PMC10728777/pdf/biad088.pdf > at pp 808.
[40] *Nutrient Management Act*, SO 2002, c 4, s 1.
[41] AEL Advocacy, "Animal Agriculture and Environmental Protection: A Multi-Jurisdictional Legislative Review" (March 2023), online (pdf): AEL Advocacy https://www.aeladvocacy.ca/_files/ugd/c883e8_a881e24cba2a444b8a2f2ccedd78a03f.pdf at 25-26.

While smaller-scale operations are often perceived as lower risk, this assumption is not always supported by evidence. These operations can still contribute to serious environmental harms, including nutrient runoff, water and air pollution, and land degradation—especially in the absence of effective oversight. Moreover, inconsistencies in regulatory coverage can undermine environmental protections overall by creating enforcement gaps and allowing certain operations to go unchecked.

Ensuring consistent baseline environmental protections across all livestock operations—regardless of size or production model—is necessary to safeguard shared ecosystems and public health. At the same time, regulatory frameworks can and should be flexible in how they support compliance, offering technical support, financial incentives, or tailored pathways that make it feasible for smaller or transitioning farms to meet standards. But to be effective and equitable, environmental protections must not be optional based on scale.

2. Minimal Oversight and Enforcement Enable Ongoing Pollution

Even among regulated farms, enforcement is minimal. In 2016/2017, only 3% of farms required to have an NMP were inspected, and of those inspected, 62% were found non-compliant.[42] According to a report by the Auditor General of Ontario, where non-compliance was identified, the Ministry often did not follow up and it rarely imposed punitive measures.[43]

This lack of oversight allows ILOs to continue polluting Ontario's waterways with nutrient runoff—a major source of nitrogen and phosphorus pollution that contributes to harmful algal blooms, groundwater contamination, and ecosystem degradation.

3. Misalignment with Canada's Global Methane Commitments

In 2021, Canada joined over 100 countries in signing the Global Methane Pledge—a commitment to work collectively toward reducing human-caused methane emissions by 30% below 2020 levels by 2030.[44] ILOs are a major source of methane emissions due to manure storage and handling, yet the *NMA* does not effectively regulate or mitigate methane release from ILOs. Without stronger nutrient management and manure-handling regulations, Ontario will struggle to meet its methane reduction targets, undermining both domestic and international climate commitments.

Weaknesses of the *Environmental Protection Act*

The *EPA* is intended to protect and conserve the natural environment by prohibiting the discharge of contaminants into the environment that could cause "adverse effects."[45] However, the Act exempts many agricultural activities from its requirements, effectively allowing ILOs to operate

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[42] *Ibid* at pp 66.
[43] *Ibid*.
[44] https://www.canada.ca/en/environment-climate-change/news/2021/10/canada-confirms-its-support-for-the-global-methane-pledge-and-announces-ambitious-domestic-actions-to-slash-methane-emissions.html
[45] *Ibid* at pp 26-27.

with reduced environmental oversight.

1. Exemptions for Agricultural Operations

Under the current framework, many agricultural operations are partially or fully exempt from key environmental protections under the *EPA*. This is because the *EPA* generally does not apply to the discharge of contaminants if it is in accordance with both "normal farming practices" and the regulations made under the *NMA*.[46] This means that even when ILOs discharge pollutants into the air, water, or soil, they often fall outside the *EPA*'s regulatory reach. This loophole has enabled unchecked expansion of ILOs while failing to hold them accountable for their environmental impact.

2. Inadequate Regulation of Air and Water Pollution from Animal Agriculture

Under the *EPA*, industries that release contaminants into Ontario's land, air, or water must apply for an Environmental Compliance Approval ("**ECA**"). While ECAs are intended to set rules for activities in a manner that protects the natural environment and human health, they often fail to set adequate thresholds for acceptable pollution levels.[47]

For example, the *EPA* allows for a cancer risk threshold of 10 to 100 in a million from pollutants emitted by ILOs before pollution control methods become discretionary.[48] Even when the cancer risk exceeds 100 in a million, the application of pollution control measures is still left to the discretion of the ECA applicant, resulting in weak enforcement and insufficient environmental protections.[49]

3. Insufficient Deterrence for Environmental Violations

The financial penalties for non-compliance under the *EPA* are far too low to deter large ILOs or corporate farms from continuing environmentally harmful practices. Under section 182.3(7), the maximum fine for a violation is capped at $100,000.[50] For large-scale operations with substantial financial resources, this amount is insufficient to act as an effective deterrent. This regulatory failure allows ILOs to remain in operation without meaningful consequences for their environmental violations.

Without a formal review, Ontario's current regulatory regime will continue to permit—and in effect, facilitate—serious and avoidable environmental harm. The unchecked expansion of ILOs poses mounting threats to ecosystems, public health, animal welfare, and climate integrity. These harms are not hypothetical—they are ongoing, documented, and worsening. A review is not only in the public interest but urgently necessary to prevent irreversible damage and bring Ontario's agricultural policies into alignment with modern environmental and public health standards.

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[46] *Environmental Protection Act*, RSO 1990, c E 19 at s 6(2).
[47] *Supra* note 5.
[48] *Supra* note 2 at 41
[49] *Ibid*.
[50] *Supra* note 8 at s 182.3(7).

C. Absence of Periodic Review

In determining whether the public interest warrants the requested review, subsection 67(2)(c) of the *EBR* directs the Minister to consider whether "the matters sought to be reviewed are otherwise subject to periodic review". At the present time, aside from using Part IV of the *EBR*, there is no statutory mechanism for the formal public review of the *NMA* or the *EPA*.

D. Additional Considerations Under Section 67(2)(g)

Pursuant to section 67(2)(g) of the *EBR*, the Minister may consider any other relevant matter when determining whether to undertake a review of legislation. The Applicants urge the Minister to consider the broader policy and legislative context in which Ontario's agricultural and environmental laws operate, particularly in relation to One Health, One Welfare principles and emerging regulatory approaches in other jurisdictions.

<u>The One Health, One Welfare Approach</u>

The Applicants advocate for a legislative framework that aligns with the One Health, One Welfare approach, recognizing the interconnectedness of environmental sustainability, public health, and animal health and welfare. According to the World Health Organization ("**WHO**"), One Health is defined as "an integrated, unifying approach to balance and optimize the health of people, animals, and the environment."[51] This approach prioritizes long-term, systemic solutions to global challenges by fostering collaboration among public health, veterinary, environmental, and community stakeholders.

The Food and Agriculture Organization of the United Nations ("**FAO**") has emphasized the critical role of legislation in implementing One Health objectives, stating that "legislation is a powerful means by which countries and regional organizations translate One Health objectives into concrete, sustainable, and enforceable rights, obligations, and responsibilities."[52] In particular, the FAO highlights the integration of biodiversity considerations into agriculture legislation as a key tool for mitigating negative impacts on human and environmental health.[53]

One Welfare further extends these principles by recognizing the links between animal welfare, biodiversity, and human well-being, considering not just physical health but also ethics, economics, and politics.[54] It encourages an interdisciplinary approach to human, animal, and environmental welfare.

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[51] World Health Organization, "One Health" online <https://www.who.int/news-room/questions-and-answers/item/one-health>.
[52] Food and Agriculture Organization of the United Nations, "One Health legislation: Contributing to pandemic prevention through law", (July 2020) online: <https://openknowledge.fao.org/server/api/core/bitstreams/7542d2b2-00e1-4d23-be33-4a39422e3210/content> at pp 2.
[53] *Ibid* at pp 5.
[54] Humane Canada, "2025 Humane Canada's One Health, One Welfare Conference" online: <https://sessionize.com/2025-onehealthonewelfare-conference>.

Ontario's current regulatory framework, particularly under the *NMA* and *EPA*, is fragmented and outdated, hindering the full implementation of a One Health, One Welfare approach. A comprehensive, unified legislative framework would allow Ontario to:

- Strengthen enforcement with clear, enforceable obligations for ILOs.
- Align agricultural policies with public health, environmental protection, and biodiversity policies.
- Promote cross-sector collaboration between experts in agriculture, public health, environmental protection, and biodiversity.
- Facilitate evidence-based decisions that account for cumulative impacts on ecosystems, human communities, and animal welfare.
- Support sustainable agricultural practices with legal incentives.

Adopting a One Health, One Welfare framework would position Ontario as a leader in sustainable agriculture, addressing the root causes of environmental degradation rather than merely reacting to its symptoms.

Approaches in Other Jurisdictions

While no major jurisdiction has yet implemented a comprehensive legislative framework solely dedicated to regulating agricultural pollution, several countries have adopted targeted policies and regulatory mechanisms that Ontario can look to for guidance.

1. Quebec

Quebec has a comprehensive regulation that relates to the environmental effects of agricultural operations. The *Agricultural Operations Regulation* under the *Environment Quality Act* is designed to protect water and soil from pollution caused by certain agricultural activities. This regulation sets standards for managing animal waste and cultivating plants in ways that minimize phosphorus runoff, with specific rules on the storage and spreading of manure to reduce watercourse contamination.[55]

2. United Kingdom

In 2020, the United Kingdom introduced the *Agriculture Act*, which incentivizes a shift away from intensive animal agriculture by offering payments that reward farmers for managing "land or water in a way that protects or improves the environment", "managing water or livestock in a way that mitigates or adapts to climate change" and promoting animal welfare.[56]

[55] *Supra* note 16 at 32-33.
[56] *Ibid* at 43.

3. Denmark's Tripartite Agreement on Agricultural Pollution[57]

Denmark has introduced a tripartite agreement aimed at reducing agricultural pollution through a livestock emissions tax, nitrogen reduction incentives, and biodiversity conservation measures. This model demonstrates how regulatory, economic, and conservation-based tools can be used together to mitigate the environmental impact of ILOs.

4. OECD Findings on Agricultural Environmental Regulation

The Organisation for Economic Co-operation and Development (OECD) has identified several regulatory approaches used in various jurisdictions, including:[58]

- Environmental Taxes and Charges (Denmark, France, Sweden) – levies on pollution to incentivize cleaner practices.
- Environmental Cross-Compliance (United States, European Union, South Korea) – linking environmental standards to agricultural subsidies and support programs.
- Community-Based Approaches (Australia, New Zealand, Canada) – cooperative conservation programs that engage farmers in sustainable land management.
- Payments for Sustainable Farming Practices – financial incentives for adopting climate-friendly, low-impact agricultural methods.

III. Recommendation: The Need for a Comprehensive Environmental Law for Animal Agriculture

Ontario's current legal framework for regulating animal agriculture is fragmented, inconsistent, and inadequate to address the full scope of environmental, public health, and animal welfare impacts caused by ILOs. The *NMA* and the *EPA*, while providing some regulatory oversight, were not designed to address the unique and large-scale environmental harms associated with ILOs. This fragmented system has created enforcement gaps, regulatory inconsistencies, and limited oversight, allowing ILOs to pollute with minimal accountability.

Nutrient runoff from ILOs continues to contaminate Ontario's waterways, fueling harmful algal blooms, groundwater pollution, and ecosystem degradation. Greenhouse gas emissions and ammonia discharge from large-scale livestock operations worsen air pollution, contributing to respiratory illnesses and environmental harm in surrounding communities. Without significant reform, Ontario's environmental health and biodiversity will remain at risk.

The Applicants submit that a single, integrated legislative framework is essential to address these

[57] Tim Searchinger and Richard Waite, "Denmark's Groundbreaking Agriculture Climate Policy Sets Strong Example for the World" World Resources Institute online: <https://www.wri.org/insights/denmark-agriculture-climate-policy>.
[58] Vaclav Vojtech, "Policy Measures Addressing Agri-environmental Issues" in OECD Food, Agriculture and Fisheries, No. 24 (Paris: OECD Publishing, 2010) 3 online: <https://www.oecd.org/content/dam/oecd/en/publications/reports/2010/03/policy-measures-addressing-agri-environmental-issues_g17a1e19/5kmjrzg08vvb-en.pdf> at pp 8.

shortcomings and provide the strength and consistency needed to regulate animal agriculture effectively. A comprehensive, stand-alone law would:

- **Establish stricter pollution limits** tailored to ILOs, including limits on nutrient runoff, greenhouse gas emissions, and manure application.
- **Mandate enhanced monitoring, reporting, and enforcement mechanisms,** including increased inspection frequency, real-time tracking of pollution levels, and public access to compliance records.
- **Integrate environmental sustainability, public health, and animal welfare** into a unified regulatory approach that reflects modern scientific understanding and international best practices.
- **Align Ontario's agricultural regulations** with evolving climate and biodiversity targets, as well as methane emission reduction targets, to ensure consistency with national and international environmental commitments.
- **Eliminate regulatory loopholes** that currently allow ILOs to evade environmental accountability.
- **Streamline administrative processes** by creating a centralized authority for enforcement, permitting, and compliance oversight.
- **Ensure consistent environmental protections** across all livestock operations, regardless of size or production model.
- **Empower communities to hold ILOs accountable by improving transparency and public access** to compliance and pollution data, and repealing Ontario's ag-gag law—the *Security from Trespass and Protecting Food Safety Act, 2020*—which undermines transparency by criminalizing whistleblowing and public interest investigations on farms and transport vehicles. This legal barrier restricts the flow of information about conditions in industrial livestock operations and makes it harder to detect, report, and prevent environmental violations.

A unified law would close existing enforcement gaps, provide consistent regulatory oversight, and hold ILOs accountable for environmental harm. It would also ensure that environmental, public health, and animal welfare considerations are integrated into a single, coherent regulatory framework.

<u>Proposed Moratorium on New ILOs</u>

Additionally, given the severe environmental and public health impacts associated with ILOs, the Applicants propose a **moratorium on the construction and expansion of new ILOs** until a comprehensive regulatory framework is established. ILOs are among the largest contributors to nutrient runoff, greenhouse gas emissions, and groundwater contamination in Ontario. A temporary halt on expansion would prevent further environmental harm while allowing time for the government to strengthen regulatory safeguards.

A similar approach has been proposed in other jurisdictions. In February 2022, California introduced Bill 2764, which sought to impose a moratorium on new and expanding ILOs generating over $100,000 in revenue.[59] While the bill did not pass, it reflected growing

[59] *Supra* note 5 at pp 39.

recognition of the environmental and public health threats posed by industrial agriculture. A moratorium in Ontario would provide the opportunity to implement a more balanced regulatory framework that prioritizes environmental protection, public health, and sustainable farming practices.

Incentivizing Sustainable Alternatives

The Applicants further propose that the new framework should incentivize the development and adoption of plant-based alternatives to animal agriculture, further reducing environmental impacts and improving public health outcomes. By promoting sustainable alternatives, Ontario can complement efforts to move away from practices that harm the environment and ecosystems.

Recommendations

The Applicants recommend the following urgent reforms to strengthen the existing framework:

- **Remove the agricultural exemption under the *EPA*** to ensure that animal agriculture facilities are subject to the same environmental standards and accountability as other industries.
- **Expand the scope of the *NMA*** to cover all livestock farms, regardless of size, and require mandatory nutrient management plans for all operations to prevent nutrient runoff and pollution.
- **Increase fines and penalties for non-compliance** under both the *NMA* and *EPA* to ensure meaningful deterrence. Financial penalties should reflect the scale of environmental harm caused and be substantial enough to discourage repeat violations.
- **Strengthen enforcement capacity** by increasing inspections, establishing a centralized compliance database, and enhancing the Ministry's authority to issue immediate compliance orders and corrective measures.
- **Introduce a moratorium on new or expanding ILOs** as a precautionary measure to prevent further harm while the province develops a modernized regulatory framework that prioritizes environmental sustainability, public health, and animal protection.
- **Introduce a comprehensive suite of incentives to support the transition away from industrial animal agriculture**, including: public investment in the plant-based and alternative protein sectors; financial and technical support for farmers transitioning to plant-based production models; and sustainable public procurement policies that reduce demand for high-impact animal products.

In the long-term, **the Applicants urge the government to introduce a single, comprehensive piece of legislation to regulate the environmental impacts of animal agriculture.** A unified law would address the existing gaps under the *NMA* and *EPA* by setting consistent environmental standards for nutrient management, pollution thresholds, greenhouse gas emissions, and animal waste disposal. A consolidated framework would reduce regulatory fragmentation, improve enforcement, and hold ILOs accountable for environmental harm.

E. The Resources Required to Conduct the Review

Subsection 67(2)(f) of the *EBR* lists "resources required to conduct the review" as another factor to be considered by the Minister when determining if the public interest warrants a review. The Applicants recognize that the scale of the review requested herein is extensive. A complete legislative overhaul is a lengthy project. However, this application has clearly set out the public interest in this outcome as well as the need for it. The consequences of not acting will be damaging for the agricultural industry and Ontario's ecology. That is why any resources required would be a worthwhile investment.

4. Summary of Evidence

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