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SENT VIA EMAIL: [christy.taglieri@ontario.ca](mailto:christy.taglieri@ontario.ca)

Ms. Christy Taglieri  
Policy Advisor Environmental Stewardship Policy  
Food Safety and Environmental Policy Branch  
Ministry of Agriculture, Food and Rural Affairs  
1 Stone Road West, 2<sup>nd</sup> Floor  
Guelph, ON N1G 4Y2

Dear Ms. Taglieri:

**Re: Environmental Registry of Ontario Number 019-1234: Proposed regulatory amendments to the General Regulation (O. Reg. 267/03 – General) under the *Nutrient Management Act* to support on-farm regulated mixed anaerobic digestion facilities**

The City of Toronto (the City) is pleased to provide comments in response to the Ontario Ministry of Agriculture, Food and Rural Affairs proposed regulatory amendments to the *Nutrient Management Act* to support on-farm regulated mixed anaerobic digestion facilities, released to the Environmental Registry for public comment on January 28, 2020.

The City commends the Province's commitment to reducing the regulatory burden to create more opportunities for processing additional feedstock in on-farm Regulated Mixed Anaerobic Digestion Facilities (RMADFs) to enable the production of renewable gas. This is an important step in moving Ontario towards a circular economy for the management of food and organic waste.

The City's Solid Waste Management Services (SWMS) Division provides waste management services, including curbside collection of organics (Green Bin Organics Program) to approximately 462,000 single family homes, 400,000 multi-residential units, along with schools and more than 7,500 small commercial businesses. The City manages approximately 170,000 tonnes of Green Bin Organics annually. The City owns two organics processing facilities that use pre-processing technologies followed by anaerobic digestion to manage material, with a total processing capacity of 130,000 tonnes per year. The City also has several processing contracts that utilize both windrow and in-vessel channel composting and anaerobic digestion in place to manage the balance of the organics generated.

Comments:

1. The City requests that the Province provide further detail and clarification on the allowance of pre-processed Source Separated Organics (SSO) (when heat processed).

The proposed amendments state that SSO could be acceptable for Schedule 2 (when heat processed). If Toronto's source separated organic materials have gone through a pre-processing system to remove contaminants but not having been heat processed, are processed in an on-farm AD system with heat processing to remove pathogens, it is unclear why they could not be allowed as an acceptable feedstock for on-farm AD systems as they would achieve pathogen kill at the on-farm AD system. The City requests from the Province any science-based rationale for not allowing this type of SSO feedstock materials at on-farm AD systems unless it has been heat processed.

The City is currently studying the ability to recover the organic fraction of the City's garbage stream through mixed waste processing. It is anticipated this stream would have a higher contaminant content than source separated material. However, should this organic fraction be treated by a robust pre-processing system to meet all standards for contaminant content as described above, the City requests that the Province consider allowance to also process this material through on-farm Anaerobic Digestion systems.

2. The City requests that the Province conduct evidenced-based scientific research to determine how compostable and biodegradable products and packaging impact the quality and generation of biogas in anaerobic digestors as well as environmental impacts on any resulting digestate product being made into compost and land applied for compostable and/or biodegradable products and packaging and their accompanying persistent contaminants of concern, such as Polyfluoroalkyl Substances (PFAS) prior to their acceptance as an acceptable product for Green Bin Programs in Ontario.

The City of Toronto is under ever increasing pressure to accept a multitude of products and packaging labeled as compostable in our source separated organics program. The Food and Organic Waste Policy Statement issued under the RRCEA recommends that compostable products and packaging be recovered for beneficial use and further encourages municipalities and owners and operators of resource recovery systems that process food and organic waste to support new technology and innovation to recover these materials.

Compostable plastics and packaging are certified under ideal laboratory conditions and are certified provided they break down in a minimum of 90 days<sup>1</sup>. Commercial composting facilities generally operate on a shorter processing timeframe. This means that many compostable products and packaging are not likely to fully degrade and compost in these systems because they do not spend the required amount of time in the system. Toronto's two processing facilities use anaerobic digestion, which is not compatible with compostable certification.

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<sup>1</sup> Biodegradable Products Institute (2012). BPI-NSF Certification Process. Retrieved from <https://www.bpiworld.org>

The City of Toronto uses pre-processing to remove contaminants which include products and packaging marketed or labelled as compostable (e.g. bamboo cutlery, coffee pods) and anything that behaves like a plastic (i.e. compostable plastic) followed by anaerobic digestion. Compostable plastics are therefore removed in this pre-processing step and sent to landfill. Further, the certification process for compostable packaging is based on aerobic composting and the results are not equivalent for anaerobic digestion. Evidence also suggests that bioplastics do not necessarily degrade more readily than conventional plastics, and may not fully degrade in a natural environment<sup>2</sup>.

The lack of standardization amongst certain products (such as bags, takeaway cups and coffee pods) increases the likelihood of confusion, resulting in residents improperly placing regular plastic products in the Green Bin and directly causing feedstock contamination. Furthermore, research is required to determine whether regular plastics, compostable plastics, and biodegradable plastics erroneously placed in the Green Bin and processed through organics processing infrastructure could contribute to macro and micro plastics entering the environment. This would not support the Province's Made-in-Ontario Environment Plan to reduce plastic waste and limit the creation of micro plastics. Evidence-based study is required to determine the impacts of new types of plastic packaging on processing systems and the natural environment and, as stated in the Made-in-Ontario Environment Plan, to build consensus around the requirements for these emerging materials.

Persistence and accumulation of PFAS are an increasing concern. PFAS are:

- used widely in the manufacturing of compostable food containers due to their water and oil repellent properties;
- shown to leach from compostable products and packaging during the composting process<sup>3</sup>; and
- linked to several negative health effects<sup>4</sup>.

The City embraces a circular economy approach which supports restorative and regenerative business process and solutions, such as the opportunity to return valuable nutrients to the soil to support regeneration.

The City incorporates this approach through its Green Bin Organics Program which, through the creation of high-quality compost, returns the nutrients from food waste back to the agricultural system, and will transform the biogas produced into renewable natural gas (RNG) which will be injected into the natural gas grid. As governments and businesses continue to adopt regenerative, circular approaches, it is imperative that the data and science on biodegradable and compostable products and packaging be robust and transparent, so as to

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<sup>2</sup> Environment and Climate Change Canada, Health Canada. "Draft Science Assessment of Plastic Pollution," January 2020, pg 26-27

<sup>3</sup> American Chemical Society. "Compostable food containers could release PFAS into environment." Science Daily, 29 May 2019.

<sup>4</sup> Agency for Toxic Substances and Disease Registry (ATSDR). 2018. *Toxicological profile for Perfluoroalkyls*. (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service

avoid further harm to the environment. Nutrients cannot be returned to the soil if it is not safe to do so.

3. The City requests the draft regulatory amendments to O. Reg 267/03 under the *Nutrient Management Act* be made available for review and comment.

The Toronto–Ontario Cooperation and Consultation Agreement (T-OCCA) signed by the Province and the City commits both governments to prior consultation on matters of mutual interest, including draft policy, legislation and regulations. The T-OCCA also contains a confidentiality clause whereby any information under the terms of the agreement may not be disclosed without first obtaining the written permission of the other party. Accordingly, the City of Toronto should be given the opportunity to see the details of the draft regulatory amendment before it becomes law.

Should you have any questions regarding our submission, please contact Annette Synowiec, Director of Policy, Planning & Outreach, Solid Waste Management Services, by email at [Annette.Synowiec@toronto.ca](mailto:Annette.Synowiec@toronto.ca) or by telephone at 416-392-9095.

Thank you for your consideration.

Yours truly,



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General Manager  
Solid Waste Management Services

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Copy to: Annette Synowiec, Director, Policy, Planning & Outreach, Solid Waste Management Services

Carlyle Khan, Director, Infrastructure & Resource Management, Solid Waste Management Services

Sandra Rodriguez, Director, Intergovernmental & Agency Relations