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Ministry of the Environment and Climate Change
Climate Change and Environmental Policy Division
Air Policy Instruments and Programs Design Branch
77 Wellesley Street West, Floor 10
Toronto Ontario M7A2T5

**Attention:** **John Hutchison**
**Senior Policy Adviser**

**Re:** **EBR Registry Number: 013-0480 - Proposed Landfill Gas (LFG) Offset Protocol**

Dear Mr. Hutchison,

On behalf of Ontario's more than 3,000 environment and cleantech firms, the Ontario Environment Industry Association (ONEIA) is pleased to provide our comments on the proposed Landfill Gas Offset Protocol.

By way of background, Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics from the federal government show that Ontario's environment sector employs more than 65,000 people across a range of sub-sectors. This includes firms working in such diverse areas as materials collection and transfer, resource recovery, composting and recycling solutions, alternative energy systems, environmental consulting, brownfield remediation and water treatment – to name just a few. These companies contribute more than $8-billion to the provincial economy, with approximately $1-billion of this amount coming from export earnings.

Members of ONEIA are committed to working with the Province of Ontario as it transitions to a low carbon economy. The Association is driven to promote policies and regulations that are consistent with the principles of sound science, environmental responsibility and economic growth. To that end, we convened a working group of members drawn from across the resource recovery services and climate change sectors to review the MOECC's discussion paper on the proposed Landfill Gas Offset Protocol.

In general, we believe that the proposed Landfill Gas Offset protocol is unlikely to generate interest by landfill operators in Ontario for the following reasons.

First, for landfill operators with facilities that have less than 1.5 million cubic metres in total disposal capacity, there are several impediments to providing offsets to the

Cap and Trade Program. As these facilities have low landfill gas recovery rates, the high capital costs per tonne of CO2e in terms of construction, operation and verification are prohibitive to undertaking such an initiative. For those large landfill operators who were proactive in the reduction of greenhouse gas emissions prior to the current protocol, it is unlikely to be an incentive.

Second, the protocol, which is based on the Western Climate Initiative (WCI), does not recognize the distinct regional differences between Ontario and California. It is important to note the WCI Offset System Essential Elements Final Recommendations Paper recognized the need for a flexible approach to applying regional baselines to accommodate regional differences. ONEIA recommends that the Province include a mechanism within the offset regulation that allows for alternate methods to be considered.

Lastly, ONEIA believes there is a disconnect between the proposed protocol and the development of a Renewable Natural Gas (RNG) market in Ontario. Given the potential lack of uptake on the Landfill Gas Protocol, the generation of RNG will be predicated on the commodity price for RNG. It is recommended that market incentives be provided for landfill operators who acted prior to the regulated landfill gas capture and destruction policies to develop renewable energy projects.

It is important to note that the conversion of methane from landfills to electricity or natural gas is a decades old technology. Companies with landfill operations have been increasingly switching from generating electricity to developing pipeline quality gas, specifically as a direct substitute or offsetting the use of natural gas or electricity at industrial facilities (e.g. automotive, pulp and paper and cement manufacturers). Today, landfill operators are moving towards supplying pipelines with RNG as pipeline companies are seeking to receive as much RNG as possible. ONEIA supports the development of an RNG system that is market driven and allows private entities generating RNG to sell the associated attributes for the highest return available in the marketplace.

As an example, Waste Connections Canada (WCC) built and operates a large-scale biogas facility at its Lachenaie Landfill in Quebec. This facility, the largest in North America, converts landfill gas to pipeline quality gas. WCC intends to develop a similar facility at its Ridge Landfill near Chatham, ON. Walker Industries is taking a similar approach at its Niagara Landfill.

RNG is also being used as a transportation fuel, predominantly with return-to-base fleets such as waste collection and municipal transit. The Ministry of Environment and Climate Change has discussed a program that would look to achieve 2% RNG by 2020 and 10% by 2030. The waste services industry began using liquid natural gas (LNG) predominantly in California over two decades ago and began the switch to compressed natural gas (CNG) in the mid to late 2000s.

Today, Waste Management (WM), Republic and WCC have the largest CNG powered waste and recycling collection fleets in North America respectively. In Ontario, WM, WCC and Emterra Environmental have CNG powered collection vehicles operating in Ottawa, Waterloo and the Regions of Peel and Simcoe County. It should be noted that municipal governments are increasingly adding the use of CNG as a prerequisite to outsourcing their residential collection contracts, and is

effecting means to driving the use of CNG through procurement. This is also an example of the Circular Economy, whereby waste materials are beneficially reused to collect future wastes and recyclables having less of an environmental impact on local air sheds.

For example, for every vehicle that is converted to natural gas, use of diesel fuel is reduced by an average of 8,000 gallons per year. This reduces greenhouse gas emissions by over 22 metric tons per year, per truck. Vehicles powered by CNG result in: nearly zero particulate emissions; a 50% reduction in smog-producing nitrogen oxide emissions compared to the cleanest diesel trucks; and cut greenhouse gas emissions by over 20 percent. While the conversion of CNG to compressed C-RNG is not a new phenomenon, its uptake is starting to take root. The generation of RNG from waste-based sources will continue to originate from landfills due to the large and consistent flow volumes.

ONEIA members, specifically those in the resource recovery industry, have been active in reducing carbon emissions We are appreciative of the opportunity to provide comments and suggestions, and stands ready to work with the Province and the MOECC in the development of a LFG Offset Protocol.

Should you have any questions about the information contained herein, please do not hesitate to contact the co-chairs of our working group, Brandon Moffatt and/or Randy Cluff or feel free to contact the ONEIA office directly at 416-531-7884.

Yours truly,

Alex Gill
Executive Director