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Cindy Acab Senior Policy Advisor Policy Development Ministry of Environment, Conservation and Parks 8th Floor, 40 St Clair Ave West Toronto, ON M4V 1M2

RE: Comments by the Ontario Environment Industry Association (ONEIA) on ERO # 013-4689: Reducing Litter and Waste in our Communities: Discussion Paper

Dear Ms. Acab:

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 *Reducing Litter and Waste in our Communities: Discussion Paper* (Discussion Paper) which expands upon commitments in *Preserving and Protecting our Environment for Future Generations: A Made in Ontario Environment Plan* (Environment Plan).

Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics 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 water/wastewater/stormwater treatment and management, materials collection and transfer, resource recovery, organics processing, composting, recycling solutions, alternative energy systems, environmental consulting, brownfield remediation – 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.

According to the Province, Ontario citizens generate nearly a tonne of waste per person every year and our overall diversion rate has stalled below 30% over the last 15 years. We agree that Ontario needs to reduce the amount of waste that we generate and divert more waste from landfill through proven and emerging methods. We would also note that the province is a leader in North America regarding food and organic waste recovery and processing, which could serve as an example of how we can improve our overall diversion performance.

The processing of these materials supports economically valuable activities, including facilities in the areas of composting, anaerobic digestion (AD), biofuels, animal feed and rendering. Currently, Ontario is home to approximately 76 facilities with a current processing capacity of 2.3 million tonnes per year. This includes 41 compost facilities and 35 AD systems, including 29 on-farm facilities and six off-farm facilities. The development of this infrastructure has made Ontario a leader in North America and has developed expertise that is currently exported to other jurisdictions such as California, British Columbia, Massachusetts, and Quebec. Further development of this expertise can help the Province solidify its position as a food and organic waste diversion leader and support efforts to reduce Ontario's carbon footprint.

Members of ONEIA are committed to engaging with governments to develop policies and regulations that are consistent with our principles of sound science, sound environment and a sound economy. To that end, we convened working groups of member companies drawn from across the environment and cleantech sector to review the Discussion Paper.

ONEIA has asked each of our four key industry sub-groups (1) Resource Recovery, 2) Water, 3) Brownfields/Soils, and 4) Climate Change) to convene a wide range of companies and gather their comments to assess and provide feedback on the Discussion Paper. Their feedback forms the basis of this letter and each of these sub-committees is ready and willing to work more closely with MECP on the specific aspects of the Discussion Paper. The Resource Recovery Committee had planned to respond to MECP in relation to the Environment Plan. However, we delayed this activity as we understood that this Discussion Paper was being released and thought it was worthwhile to consolidate our feedback in this response. Throughout this process, as well as any consultation related to the Environment Plan, our members are ready to offer a wealth of "made-in-Ontario" expertise that can help the Province achieve its goals of economic prosperity and environmental protection for current and future generations.

OUR OVERALL FRAMEWORK

Since our founding in 1992, we have proactively engaged with various levels of government to provide advice on pressing environmental challenges. It is clear from the Discussion Paper that MECP sets out goals, actions and performance measures and outlines how we will decrease the amount of waste going to landfill and increase the Province's overall diversion rate. To provide greater detail to MECP, ONEIA has broken out its response into the eight key areas for action. The actions and the corresponding page numbers are provided below:

- 1. Prevention and reduction of litter from our neighbourhoods and parks (Page 2);
- 2. Increased opportunities for Ontarians to reduce and divert waste at home, at work and on the go (Page 3);
- 3. Make producers responsible for the waste generated from their products and packaging (Page 7);
- 4. Reduction and diversion food and organic waste from households and businesses (Page 8);
- 5. Reduction of plastic waste going into landfills and waterways (Page 11);
- 6. Provide clear rules for compostable products and packaging (Page 13);
- 7. Recover the value of resources in waste (Page 15); and
- 8. Support competitive and sustainable end markets for Ontario's waste (Page 20).

RESPONDING IN DETAIL

The following sections offer detailed observations tied to sections of the Discussion Paper and the responses offered by majority consensus of the subcommittees of ONEIA member companies. This overview offers the collective feedback of more than 20 companies working through our committee structure and we look forward to following up in detail with respect to specific aspects as the Province moves forward with its work in these areas.

Prevent and Reduce Litter in Neighbourhoods and Parks

We agree with the Province on sustained efforts to address litter in our streets, green spaces and along our shorelines. We support the concepts that MECP has laid out in the Discussion Paper relating to the prevention and reduction of litter in our neighbourhoods and parks including raising awareness through education and harmonizing blue box materials, addressing business and institutional regulations and providing better information on waste reduction efforts.

1. How best can the Province coordinate a day of action on litter?

ONEIA supports the Province's focus on reducing litter in our neighbourhoods and parks and its intention to establish an official day focused on the clean-up of litter in Ontario. While this is a laudable initiative, we would recommend that given existing and well-established clean-up programs such as the Great Canadian Cleanup, community-based programs (e.g. Boy Scouts, Girl Guides) as well as

corporate-sponsored events, the Province should encourage citizens and businesses (including employees) to develop awareness and motivational campaigns targeting their communities throughout the year.

2. What do you or your organization do to reduce litter and waste in our public spaces? What role should the Province play to facilitate this work?

ONEIA member companies support various programs across Ontario to reduce litter and waste in our public spaces. ONEIA is open to supporting MECP's efforts through our various communication channels and by encouraging our member companies to undertake voluntary actions on a local level. We have an "Emerging Leaders" program within Ontario that engages up-and-coming business professionals in our sector (consistent with MECP's concept of future conservation leaders) and this program could be another way in which we can actively support the clean-up of Ontario's green spaces.

We would recommend that the Province refer to existing programs that have been established by Metro Toronto, Metro Vancouver as well as anti-litter and littering tools and campaigns developed by the Canadian Plastics Industry Association (CPIA) and United States-based "Keep America Beautiful" as a starting point for these campaigns.

3. What and where are key hotspots for litter that you think should be addressed?

The increasing amount of litter is a reflection our society, constantly on the go, taking or acquiring waste during our journeys to work, to play and other activities. Often, there may not be accessible or appropriate waste diversion collection systems to properly capture this waste. Consequently, this "0on-the-go" waste is ending up in the environment in the form of land or marine litter.

This situation is exacerbated by the rise of Illegal dumping, with research and the experience of cities in other provinces (most notably Metro Vancouver) showing a correlation between the dumping of waste materials in side streets and alleys and increased littering. It is important to note that Illegal dumping is not solely an urban phenomenon as many land owners and farmers have encountered residential and commercial wastes illegally dumped on their properties, which can have an environmental impact as well as a direct economic cost as they clean up their contaminated lands.

4. How do you think litter can best be prevented in the first place? Where is access to diversion and disposal particularly limited?

To prevent land and marine litter and illegal dumping, we need to focus on the source through public education and producer responsibility. ONEIA believes that the Province should educate the general public on the impacts of litter as well as require collection and diversion of products and packaging to enable their use in a truly circular economy. Film plastics and single-use products as well as multi-layered plastics are particularly challenging to address. We would ask that the Province work closely with the waste service providers on the collection and diversion of recyclables in the parks and public spaces and utilize their knowledge regarding the harmonization of the materials that are collected across the Province.

Increase Opportunities for Ontarians to Reduce Waste

ONEIA agrees with the Province that while we have made significant progress on the reduction and diversion of waste generated in the home through municipal diversion programs (i.e. Blue Box, Green Bin), we need to put additional efforts in place to encourage diversion in the ICI sector. The regulatory framework for this sector has largely been ineffective, primarily due to several factors including a lack of enforcement.

ONEIA agrees that the Blue Box program requires harmonization across the Province to address what collected materials are acceptable in the program.

We would recommend that the Province identify priority materials that it wishes to collect and divert and suggest that MECP develop metrics that are clear and transparent for all stakeholders involved. The metrics should focus on the materials that have the highest market values and/or the highest greenhouse gas (GHG) avoidance potential (i.e. organic waste).

ONEIA has supported the Province in its efforts to divert waste from landfills as well as the utilization of existing infrastructure and new technologies that are available to process these discarded resources. Similar to other jurisdictions across North America, Ontario is experiencing issues with respect to waste diversion and recycling including the concept of the 'evolving tonne' whereby there has been a shift in the composition and source of materials that has resulted in a reduction in waste diversion rates. Given the concept of the evolving tonne, there have been calls from stakeholders along the materials chain of custody to move from weight-based metrics to a life-cycle analysis. Using established and accepted methodology by the USEPA, the life-cycle analysis is a better measurement of environmental impacts and benefits which better articulates how recycling drives GHG reduction and energy savings.

As an example, ONEIA firmly believes that organics management is an important aspect of climate change resilience as Ontario communities have a huge opportunity to mitigate GHG emissions by addressing the issue of food waste, composting organics, and by creating or using organics management and biosolids management facilities in their areas. The GHG emission reductions from these individual and community efforts in organics management will have a positive influence on the advancement of climate change and on the Province's overall GHG targets as well as create new jobs and provide recurring economic development.

1. How can the Province best help the public participate in waste reduction and diversion activities? How can the Province facilitate better diversion in lagging areas, such as multi-unit residential buildings?

ONEIA supports a full extended producer responsibility (EPR) program that would require the producers of products that are produced or sold in Ontario responsible for how their wastes are managed. With respect to single-family residences, ONEIA believes that the Province can engage the public by exploring how it can incorporate full extended producer responsibility to the municipal Blue Box Program. We need producers to ensure that the full life-cycle of their products is understood and managed appropriately by them. However, ONEIA would caution that the wholesale application of full EPR on the industrial, commercial and institutional sector may not be applicable and that a sector-by-sector review (i.e. multi-family residences, construction and demolition, retail, etc.) is more appropriate.

While the collection infrastructure for diversion and waste is well entrenched today, Ontario's waste and recycling infrastructure requires further growth to follow through on the processing of the materials that are diverted. ONEIA also believes that the Province needs to support the use of these diverted materials to end markets in the Province and other jurisdictions. In today's supply chain, little to no efforts have been made on the recycled content that needs to go into products, thus, not stimulating a market demand for these materials. ONEIA addresses the issue of creating market demand in the end of this document in the section - Support Competitive and Sustainable End Markets for Ontario's waste.

In relation to multi-family buildings, it is important to note that waste and diversion collection in multifamily residences is part of the ICI sector. We provided feedback in the response to the Environment Plan related to improving on existing building codes. We agreed with modernizing the building code for residences and other buildings as well as future planning for concepts such as organic waste and other materials diversion.

2. What types of initiatives do you think would result in effective and real action on waste reduction and diversion for the ICI sectors?

ONEIA members have been on the front lines of working with the ICI sector to address their customer waste streams and the implementation of diversion efforts. ONEIA knows that many enterprises within

the ICI sector have successfully introduced and sustained waste diversion and recycling activities within their organizations. However, more work remains in addressing root causes and encouraging market-based solutions.

We believe the Province needs to set priorities, in consultation with the private waste services industry and potential users of diverted materials, as it sends clear signals to the generators of these materials and allows the collection and processing infrastructure to respond accordingly. ONEIA cautions the Province against setting waste diversion targets without a clear understanding of where we are going with the policy or approach.

3. What role do you think regulation should play in driving more waste reduction and diversion efforts from the ICI sectors?

ONEIA agrees with the Province's focus on producer responsibility as well as other existing policy measures such as the *Food and Organic Waste Policy Statement* (Organics Framework). We believe the Province should continue to move forward with these policies to drive more waste reduction and diversion efforts in the ICI sector. Businesses require regulatory certainty, and this will be critically important in driving higher levels of waste reduction and diversion within the ICI sector.

With respect to regulatory certainty, ONEIA believes in regulation that is developed in conjunction with the private sector and that is based on clearly-defined policy objectives that protect the environment and encourages companies to invest in new and innovative technologies and approaches have the best chances of success and of generating considerable economic spin-offs. Approval processes and permitting should be outcome-focused and based on sound science and economics that encourage solution providers and the market to develop innovative ways to meet these standards.

The materials that the waste services industry collects, and processes should be viewed as commodities within a competitive global economy. If the private waste services industry is to serve the needs of its customers, as well as grow and thrive, it requires a regulatory framework that is consistent, effective and responsive. This will not only encourage companies to invest in new and innovative technologies and approaches but also incents those companies to develop feedstocks that lead to the creation of value-added products in the regions where the feedstocks originate, thus lowering costs for brand owners, municipalities and taxpayers.

ONEIA recommends a truly joint collaborative process whereby government sets the policy outcomes it wants and then engages the private waste services industry to determine the best way to achieve these policies and the outcomes.

ONEIA believes that regulations should:

- Send clear signals to the private sector;
- Not be prescriptive but outcomes-based;
- Recognize that a "one size fits all" approach is often not appropriate, given the geographic diversity of Ontario and the specific concerns of different industries;
- Provide economic incentives to incent investment;
- Encourage collaboration and interaction through open and competitive markets, and;
- Be flexible to encourage continuous improvements and innovation through the support and development of innovative technologies.

For example, the concept of generators of organic waste being responsible in the Organics Framework could be effective if proper enforcement occurs. We believe the Province should collaborate with municipalities on the enforcement of existing regulations. As an example, the City of Vancouver requires as a condition of obtaining and holding a business licence that enterprises have an organics collection service. This can be spot checked by the MECP of host community bylaws officers as required. This could give MECP an effective way to engage, regulate and monitor the thousands of small

and large generators of organic waste across the Province. The operational side of MECP could then better address compliance issues with generators of organic waste and could also focus on the few hundred consolidation points (i.e. transfer stations) in the Province.

Therefore, ONEIA recommends that the measures would be administered by the private transfer stations and municipalities. It would be enforced by the government through spot checks and annual data reviews. These measures could also be funded through measures such as a per tonne levy, a precedent for which the Province could look to the similar experiences of Manitoba and Quebec in this area. This could address the artificially low cost of waste disposal in many jurisdictions (e.g. in Michigan and New York). Such a levy could be applied at the waste collection point rather than being applied to landfills as it would then make Ontario landfills uncompetitive to those in other jurisdictions (e.g. Michigan, New York). The revenue from the levy should be transparently reported and redirected specifically to waste reduction and diversion, and not included in general revenues.

We would also recommend that MECP provide clear direction about the types of generators that are required to comply with the Organics Framework as significant work has been done by the US-based Natural Resources Defense Council (NRDC) in this regard (for reference, please see https://www.nrdc.org/sites/default/files/food-waste-city-level-report.pdf). We also believe that through coordination with municipalities and bylaw changes, the Province can initiate the enforcement program while additional efforts are put into data tracking/analytics surrounding waste that is moving through transfer stations. This will allow for increased organics diversion at a municipal level as a start with subsequent measures targeting transfer stations to come later once enough data has been gathered.

4. How can we get accurate information on waste reduction and diversion initiatives in the ICI sectors?

Before collecting new data, the Province should look at what it already collects and perhaps does not use to the greatest benefit of all concerned. ONEIA members (and other companies in the broader waste and resource recovery sector) regularly provide data to MECP through their annual reports. This data could be mined for information related to waste reduction and diversion efforts within the ICI sector. Our companies caution the Province that regular reporting provided to ministries such as MECP does not seem to result in a better understanding of the situation or policy discussions that are informed by iteratively improving data. If the information collected is not being used, companies have a right to ask why they are collecting it and incurring a cost to do so. This is particularly poignant when it is likely that this data would allow for better analysis of the ICI sector and policies that further government and industry objectives.

An analysis on this data, as well as an improvement on the type and quality of data that is collected would allow the Province to clearly identify which materials are effectively being processed and which materials have little to no beneficial reuse. ONEIA is willing to collaborate with MECP on how we can modify the submission of these reports to allow for aggregation/analysis of the data that is submitted.

5. What do you think about a Province-wide program for the recovery of clothing and textiles?

Textile and clothing waste are a growing worldwide problem. ONEIA members support a program that would recover clothing and textiles. If the materials are not reusable, then we would ask MECP to address how clothing and textiles are produced to allow them to be reutilized through a producer responsibility approach, recognizing, of course, that the vast majority of such materials are produced in the developing world and then imported into the province.

ONEIA is unclear on the existing infrastructure that is available today in the Province for the reuse of these materials to produce new products for Ontario or global markets. As we explore introducing recovery of waste materials, this should go hand-in-hand with an understanding of whether there are existing end markets for new products or whether government could play a role in stimulating / encouraging them.

Make Producers Responsible for Their Waste

1. How do you think the Blue Box program could best be transitioned to full producer responsibility without disrupting services to Ontario households?

ONEIA believes that the Province should continue the path it began with ongoing consultations that have engaged the producers of the products and packaging, the waste collection/processing providers, and municipalities. Further emphasis needs to be placed on the end markets that can utilize the materials that are collected and reutilized. We need to build a more robust processing infrastructure for the materials that are collected and diverted. We should also understand that the programs will continue to evolve and revisions/modifications to the materials that can be accepted into the program (i.e. evolving tonne) will require change and the policies that we implement should provide measures to allow for the implementation of these changes.

2. Should it transition directly to producer responsibility under the Resource Recovery and Circular Economy Act, 2016 or through a phased approach?

ONEIA believes that the Province should continue on its current path. The industry has been moving forward under the approach that has been laid out and though not all parties will be happy all the time, progress is being made and as policies are being implemented we should allow for modification from time to time to ensure we are achieving the consequences that we sought from the outset. ONEIA would caution MECP that its new approach does not substitute one monopoly for another, nor that it replicates the status quo. By allowing for a truly open and competitive market in Ontario, the Province will signal that Ontario is truly "open for business" and that, in turn, should attract new investment in innovative diversion and recycling technologies, thus creating new jobs and driving recurring economic development.

3. When do you think the transition of the Blue Box program should be completed?

ONEIA believes that the transition needs to occur in an orderly fashion as was discussed during the previous consultations.

4. What additional materials do you think should be managed through producer responsibility to maximize diversion?

ONEIA believes that the materials that have been contemplated to date are acceptable and the concept of review/modification of the policy as outlined earlier, with ongoing industry consultations, should be undertaken to review additional materials that should be added to the program.

5. How can we make it easier for the public to determine what should and should not go into the Blue Box?

ONEIA believes that an engaged public is an important ally in reaching waste reduction targets but would caution that they should not directly determine what should or should not be allowed to go into the Blue Box. The public are not experts in this field, and they are bombarded with market messages from various products about their recyclability and "green" position which are often factually untrue. Therefore, we believe it is more prudent to have the Province, together in an informed discussion with municipalities, the private waste collection and processing industry, the producers of the products and packaging and the users of the diverted materials, set the policy on what should go into the Blue Box.

6. How should the Province implement the transition process of its existing programs to producer responsibility without interrupting service?

ONEIA believes that the Province should continue the course of action it has already outlined, ensuring that it continues to work collaboratively with the various stakeholders to minimize disruption.

Reduce and Divert Food and Organic Waste

ONEIA agrees with the Province that food and organic waste create methane, a potent GHG that contributes to climate change, which is also considered a short-lived climate pollutant and thus should be a prime focus in the next five years. We also agree that we lose opportunities to preserve valuable resources that can be used to support healthy soils and reduce GHG emissions by not recycling these materials. ONEIA is supportive of MECP's efforts to double the current diversion rate of food and organic waste which would lead to considerable economic investment in the Province and allow for job growth and recurring economic activity.

ONEIA participated in the development of the Organics Framework under the *Resource Recovery and Circular Economy Act, 2016* and believes that it provides direction to municipalities, industry as well as the ICI sector by setting targets to reduce the amount of food and organic waste sent to landfill.

In our response to the Made-in-Ontario Environment Plan, ONEIA member companies were not in favour of a blanket ban on organics from landfill but were strongly in favour of much stronger measures to divert higher volumes of organics and ensure value-added processing of these materials in Ontario. From our on-going engagement with our industry and with the Province since that point – and recognizing that the Province is moving towards what it calls a "ban" on organics, supported by most stakeholders in this space – we are broadly supportive of this direction within the context of the following considerations and recommend that MECP consider them as it moves forward in this area:

- One-size-fits-all and prescriptive approaches have not generally supported the results desired by industry and the Province and we would caution against their broad adoption;
- We recognize that the type of landfill "ban" on organics advocated by the Province will practically not be a total ban and will allow for considerable flexibility in implementation and rely on on-going consultation with major stakeholders;
- The Province should ensure that a goal of the policy is to provide a consistent and high-quality supply of organic materials for firms that can put it to productive re-use in Ontario;
- The Province should learn from the experience of other jurisdictions (e.g. Metro Vancouver) where an organics ban has posed considerable challenges;
- The stronger regulations on the diversion of organics the document envisions should not unwittingly increase the cross-border leakage of materials (currently estimated at 3.5 million tonnes per year) that could be put to productive re-use in Ontario;
- The Province should focus on upstream intervention with generators and processing facilities, not on diversion at landfill where organics are often too contaminated for re-use in a wide range of applications; and,
- The Province should focus on sending a clear signal to the market and avoid prescribing how companies should best use organic materials, recognizing that there is a spectrum that includes recovering the environmental and energy benefit of organic material whether through the nutrients within compost, biosolids, thermal heat from anaerobic digestion, or RNG from landfill methane collection. These and other re-uses should best be determined by market dynamics, not by government mandate.

As it relates to the specific questions on the organics to landfill ban:

• Which facilities should be subject to the ban? ONEIA believes that if the Province moves towards a ban, there should be flexibility at the beginning of the supply chain (i.e. generators, waste collection service providers, transfer stations) by engaging the largest generators first. A generator-specific policy that focuses on larger producers of organic waste would be the most effective with a phased-in approach. We would recommend that any enforcement of the restrictions of organics to landfill needs to occur at the generator level and at transfer stations, where 90% of Ontario's waste is aggregated. The collection and aggregation of food waste can be

accomplished at the transfer stations, thus allowing these materials to be directed to alternative locations for further processing. Once waste reaches a landfill it is often too contaminated to recover. Once waste reaches a landfill it is often too contaminated to recover.

- Waste generators that could be impacted: A generator-specific policy focused on large generators
 of organic waste would be the most effective with a phased-in approach. Large generators of food
 waste and food scraps require a program that separates these materials from their other waste
 and recyclable streams. A considerable number of large generators already do this today and thus
 implementation of this policy could be easily achieved for these large generators. ONEIA believes
 that concerns have been raised by ICI establishments that likely would not be triggered under the
 policy measure or small food waste generators believe that they would be captured under this
 measure, however, it is not likely the case based on the 300 kg/week threshold outlined in the
 Organics Framework. We recommend that MECP focus on identifying "low hanging fruit" (e.g.
 municipalities with large, dense populations that do not have green bin collection systems) and
 require them to come online prior to requiring large municipalities that have been good, early
 adopters, to increase their diversion rates. Good examples of generator-based diversion policies
 are found in California, New York City, and northeast US states.
- When should a ban come into place? Any implementation of restrictions on organics to landfill should be phased in but we believe that the Province should move up the timelines for the large generators from 2023. We can then phase-in the smaller generators in the following years as more processing capacity comes on line. Additional processing infrastructure will be required in the Province and the market will require a clear and consistent signal to allow for development of this infrastructure through a proper phase-in of the program including the collection service providers and the transfer stations.
- How can compliance and enforcement be achieved? ONEIA believes that the private waste collection industry, in conjunction with the Province and the municipalities, is the best place for the province to engage as it considers restrictions on organics going to landfill. We believe that focusing on the disposal sites is not necessarily the best approach rather than focusing on diversion programs at the generator and following through the entire supply chain.

ONEIA estimates that \$500-million to \$1billion is required to construct the necessary organics processing infrastructure that would be required to process the additional food waste and organics that is not currently being processed as well as over \$150-million in recurring operational costs that would be required to sustain these facilities annually. With the proposed changes to streamlining approval processes, this will incent the private sector to invest in appropriate processing facilities, thus, driving over \$3 billion in economic activity over a 20-year period. The diversion of this organic waste will reduce GHG emissions, lead to new investment in jobs and infrastructure, and yield significant climate, economic and public health benefits by 2030.

ONEIA agrees with and understands the Province's comments that any landfill restrictions on organics must make sense for the communities that will be impacted. Extensive consultation has occurred surrounding this policy measure and ONEIA would request that MECP undertake the actions that were outlined in the Organics Framework, including further consultation on the ban. We understand that comments and concerns need to be addressed regarding implementation and operational challenges including the necessary time to plan and construct resource recovery systems. However, we believe more than \$500 million in capital is required to implement this measure and the industry will withhold necessary investments until further implementation/clarity is provided by the Province.

ONEIA members know that effective organics management plays a key role in ensuring clean air for Ontarians, and that a comprehensive provincial network of compost, anaerobic digestion and modern landfill facilities is essential. Recovering the environmental and energy benefit of organic material, whether through the nutrients within compost or thermal heat from anaerobic digestion, or RNG from landfill methane collection will allow these facilities to contribute to cleaner air and create economic opportunities.

1. What can be done to increase the safe rescue and donation of surplus food in Ontario?

ONEIA believes that the Province can work with the food production, food processing and distribution supply chain to increase the safe rescue and donation of surplus food in Ontario. A key resource that MECP could rely on is the work completed by ReFed (<u>https://www.refed.com/</u>) in the United States that has looked at a variety of policy measures that could support these efforts. Food should be rescued before becoming waste as it not only helps local organizations but can drive economic activity for rural areas and address food insecurity. The Province should continue with efforts such as the donation tax credit and utilize similar policies for the use of organic by-products such as compost and digestates for farmers that utilize these products.

2. What role do you think government and industry can play in raising education and awareness on the issue of food waste?

Public acceptance and engagement are critical to build support for beneficial reuse and land application of organic material (i.e. food and organic waste that have been anaerobically digested or composted, biosolids, etc.). Following the principle of using resources wisely that is central to the Made-in Ontario Environment Plan, ONEIA encourages MECP to collaborate with other provincial ministries and industry associations in the agriculture, forestry and mining sectors to leverage programs and campaigns for public awareness and education. This will help dispel the myths and preconceptions associated with these types of materials and promote their value, resource recovery, soil conservation, and GHG reduction.

It is critical for the success of the Organics Framework that the Province supports the development of organics processing infrastructure. It is the shared responsibility of all Ontarians, residents and businesses alike, to protect their local environments, be it at home, work or in our shared natural environment. This should also extend to the development of this critical processing infrastructure as all too often it is met with NIMBYism.

3. Do you think that the Province should ban food waste? If so, how do you think a ban would be best developed and implemented?

ONEIA supports measures that divert organics from landfill for reasons stated previously in this document. If the Province chooses to move forward with some form of landfill ban, we would urge it to consider the following:

- It needs to send a clear signal to the market while not imposing prescriptive solutions upon it. Organics diversion is a classic place to encourage an outcomes-based measures where the outcomes are informed by science and thorough industry engagement;
- Careful consideration should be given to the movement of waste from Ontario to other jurisdictions for disposal. The Province's data confirms that approximately 3.5 million tonnes of waste are disposed in Michigan and New York annually and depending on how diversion measures are enacted, this level of cross-border disposal may actually increase;
- By the time organic waste reaches the landfill it is often too contaminated to sort for beneficial reuse, except as methane capture from landfill.

ONEIA believes that the Province should implement landfill restrictions on food waste that align with the Organics Framework and includes generator diversion programs that focus on generators of food and organic waste above a certain threshold. ONEIA also believes that the generator policy should be enforced with the use of collection service providers, local health units and municipal by-law officials as they are engaged with the generators across various municipalities in Ontario. We believe that the

transfer stations in the Province provide a key aggregation point for these materials and thus a point of enforcement for the Province and data capture to understand the impact of this policy.

The use of organic matter found in our organic waste streams and municipal biosolids streams can also address declining soil health across the province by rebuilding carbon soil reserves, leading to higher crop yields, lower runoff of soils and reduction of nutrient flow into our waterways. A specific example of this would be a tie-in with the Healthy Soils initiative that was outlined by OMAFRA last year. It references compost, digestates and other soil amendments such as municipal and industrial biosolids that could be useful for building soil carbon and redistributing the nutrients to locations that need them for crop production (for reference, please see page 22 of

http://www.omafra.gov.on.ca/english/landuse/soil-strategy.pdf).

Reduce Plastic Waste Going into Landfills or Waterways

ONEIA agrees with the Province that litter and plastic pollution on land and in water bodies is becoming a pressing global issue. We know that plastic waste is having a detrimental impact on fish and wildlife as well as our productive agricultural lands. We also agree with the Province that this issue is best addressed by working with other levels of government as well as the industry to better manage plastic wastes. We completely agree that a lack of harmonization across national and international markets has been an impediment to the diversion of plastic wastes and thus requires more attention from policymakers. We support the development of national standards for recyclability and proper labelling of products to ensure that they are properly managed. We have provided previous correspondence with the provincial and federal government on this matter.

1. What do you think is the most effective way to reduce the amount of plastic waste that ends up in our environment and waterways?

ONEIA members play a pivotal role in enhancing diversion of plastics in both the municipal and ICI sectors through their strengths in logistics and infrastructure that can collect and process these materials in an environmentally-responsible manner and return them to the economy as secondary resources.

It is important to note that ONEIA does not believe in "silver bullet" or one-size-fits-all approaches. What works in Ontario may not be efficient or effective in other provinces and vice versa. Rather, we recommend that each provincial and territorial environment ministry should engage with the private waste services industry, local governments, brand owners and other pertinent stakeholders along the materials chain of custody to discuss the key challenges and opportunities to increase plastic waste diversion in both the municipal and ICI sectors within their respective provinces.

ONEIA supports the establishment of the circular economy, backed a sustainable materials management systems approach to using and reusing materials more productively over their entire life cycle. However, reaching the goal of 100 percent zero plastic waste may be unattainable unless new and advanced recycling and recovery technologies are recognized as diversion from disposal. By taking a holistic approach to the lifecycle of product and packaging, a sustainable materials management framework compliments a circular economy.

Toward this effort, we recommend that Ontario advocate for the following components of a national zero plastic waste strategy:

- Any strategy must include all stakeholders involved in the chain of custody of plastic materials and include representatives that are directly involved in the private waste services industry specifically in the collection and processing side of the business;
- Any discussion of the structure or restructure of waste diversion and management policies and regulations should:
 - be outcomes-based;
 - o provide economic incentives to incent investment;
 - o encourage collaboration and interaction through open and competitive markets, and;

- be flexible to encourage continuous improvements and innovation through the support and development of innovative technologies.
- Producers (including brand owners and first importers) must be fiscally responsible for the management of their products and packaging at their end of life. However, we do not recommend that producer responsibility programs currently in place for municipal diversion programs be introduced into the ICI sector as these programs would exacerbate many of the stated issues of concern. Rather, specific producer responsibility programs (construction and demolition, food waste organics, etc.) should be developed;
- Establishment of nationally harmonized definitions and performance standards to ensure claims of recyclability or compostable products so as not to inundate local markets with materials that municipal and industry collection systems cannot process;
- Any targeted action on reducing plastic products and packaging including bans, fees or recycled content requirements must undergo a science-based life cycle analysis (which includes economic assessment) before approval and implementation so as not to cause unintended consequences; and,
- Governments at all three levels should commit to procurement programs to stimulate these end markets and create pull for these materials which in turn can stimulate the development of a broader circular economy.

2. What roles do you think the various levels of government should play in reducing plastic waste?

ONEIA has provided feedback to the federal and provincial governments in the past related to the reduction of plastic wastes. We believe that the federal government can create national standards for the harmonization of end market processing, which will increase quality, processing efficiencies and end of life value. The Province can create a level playing field which equally promotes resource recovery as it does for recycling, thus, providing a boost to the emerging resource recovery industry and advance the transition to technologies that create higher value products from these recovered resources. ONEIA believes that governments at all levels can introduce purchasing policies which promote a circular and sustainable economy including mandated recycled content and mandated domestic recycled content, where applicable. We also believe that the Province should revive its Keep Ontario Beautiful campaign as well as requiring municipalities to have anti-littering by-laws and enforce the provisions of diversion options in public spaces.

3. Would you support and participate in shoreline and other cleanup projects to keep our waterways and land free of plastic waste?

ONEIA member companies currently engage in and support many different cleanup projects and would continue to do so. We are more than willing to work closely with the Province on these projects/programs.

4. Would a ban on single use plastics be effective in reducing plastic waste?

ONEIA is supportive of a ban on single use plastics; however, in those instances where there is sciencebased life cycle analysis that identifies either environmental benefit or neutrality, then single use plastics should be available for use. We would caution against "magic bullet" solutions, as previously noted, and draw attention to the need for a dialogue in this area that is based on data and impact, not upon public perceptions drawn from often-inaccurate but emotional social media posts.

5. What are your views on reducing plastic waste litter through initiatives such as deposit return programs?

ONEIA believes that deposit return programs can provide a needed driver for languishing product recovery rates especially in the multi-residential sector. However, several factors need to be considered, including:

- 1. Does the material stream require a deposit program?
- 2. Does the current recovery rate warrant a new program to reach higher rates?
- 3. Where is the current leakage from the system?
- 4. What is the cost-benefit balance of the new system (i.e. chance of success at what price)?
- 5. What minimum deposit rate would be necessary to drive recovery behaviours?
- 6. Ensure that the deposit scheme is run at a transparent cost and does not present an opportunity for companies to increase their cost to consumers, while hiding behind the deposit program. Such an outcome would erode consumer confidence in the program
- 7. There is an environmental impact to a deposit program as it reduces the logistics efficiencies and revenue sources from the current curbside collection program and adds additional transportation resources to the roads.
- 8. Deposit programs are less convenient for consumers, as the current system requires curbside efforts, a deposit program would require a return to retail, a reverse vending machine or drop-off depot commitment to be effective, the making of this effort which will be strictly in line with the motivating impact of the amount of the deposit.

Therefore, ONEIA believes that the potential benefits of a deposit return scheme can lead to high return rates, high value due to purity, lower littering of the deposit category containers, and less leakage to the marine and other environments. Overall, the potential costs of a deposit return scheme are the price of implementation to producers, the potential for fraud, cost increases and profit taking from producers, the inconvenience to the user and the environmental impact to the community of adding a program and the net impact of the program will come down to the sophistication of the design of the scheme and the balance of achieving effectiveness over expediency.

Provide Clear Rules for Compostables

ONEIA and its members have considerable experience in the production and management of compostable products and packaging. We believe that further dialogue is required as not all compostable materials are made equal, and not all technologies can handle the same material, thus claims are made by manufacturers that are not reflective of actual conditions once the materials enter the waste stream.

ONEIA agrees with the Province that it is not clear which products and packaging are compostable, recyclable or require disposal and the public receives mixed messages regarding how to dispose of products. In relation to the questions that have been asked in the discussion paper on compostables:

- Making producers responsible for end of life management of their compostable products and packaging: ONEIA agrees that producers of compostable products should be required to work closely with various types of processing infrastructure to ensure that their products break down properly and that accurate information is provided to the public about the compostable nature of their products and packaging. Packaging that is not properly designed (e.g. plastic compostable cups with tin foil lids) will need additional work by the consumer in order to be recycled (e.g. separating components and depositing them into different bins) and often consumers will not know this. Allowing inappropriately constructed compostable packaging into green bin programs is a slippery slope which could result in confusion for consumers, further contamination at organics processing facilities, and additional work or impacts at a landfill or other facilities.
- Encouraging municipalities and waste management service providers to adjust their processing methods and technologies to support the composting and anaerobic digestion of these materials: ONEIA does not agree that those receiving the waste products should be required to amend their technologies to suit them, as technologies to process organic waste vary. Depending on the system design and how the food and organic wastes are managed, the outcome of the compostable products changes. The ability of the material to break down depends on such variables as seasonal variances, temperature, moisture content, type of

technology used to process the material, composting or digestion timeframes, etc. Furthermore, materials that break down in aerobic composting do not break down in anaerobic digesters due to decreased contact time or are removed by separation equipment prior to entering the digestion process. However, small pieces of plastic would make it through each facility and the degradability of the products and packaging are important as it ensures that we do not produce end products that have foreign material that could end up in our agricultural landscape.

- Requirements for products and packaging marketed as compostable to be certified per a standard that can be processed in Ontario: There are numerous product standards for compostable packaging available in the marketplace, and the various terms such as biodegradable and compostable cause consumer confusion with how to responsibly dispose of the item. ONEIA agrees that standards for certification are necessary around the compostable nature of a product/package and we have worked with other associations and certifying bodies throughout North America that can support these efforts. We would recommend Ontario look to existing standards to ensure we do not duplicate efforts.
- Reviewing the Guidelines for Production of Compost in Ontario: Ontario has the most rigorous standards for compost quality assurance in the world, and the Province should continue to focus on the quality of end-product instead of being prescriptive in how facilities process organic waste. The development of product quality standards for digestate should occur in consultation with the industry related to AD facilities. ONEIA does not recommend that the Province be prescriptive in relation to clarifying that certified compostable products and packaging are acceptable feedstocks.
- Requirements for new organics processing facilities to adopt processes and technologies that can effectively manage compostable products and packaging as a condition of their *Environmental Compliance Approval:* Composting is not a "one size fits all" solution, and project developers have great consideration of the type of waste they are handling when they select the technology to process organic waste. Prescribing what technologies and processes as part of their ECA that a facility should use would vastly alter the existing and planned infrastructure and may move the industry away from the common goal of diverting food and organic waste from landfill and focus on processing compostable products and packaging. The use of compostable products and packaging is a complement to the main objective and not the primary objective.

1. How do you think compostable products and packaging should be managed in Ontario?

ONEIA believes that the Province should develop a task force to work with the producers of compostable products and packaging, the waste collection/processing industry, municipalities, etc. to ensure that we have standardized rules relating to the certification bodies that assess the compostable nature of the products and packaging that we would allow in the Province. We should include producer responsibility requirements related to these products as well to ensure that we do not have leakage of poorer quality products and packaging into the Province.

2. Should producers of compostable products and packaging be held responsible for the management and processing of their materials?

ONEIA believes that producers of compostable products and packaging should be held responsible for the management and processing of their materials. However, if the materials comply with an independent certification or standard, we believe that these obligations could be relaxed or removed.

3. What role do you think standards and facility approvals should play in the proper management of compostable products and packaging?

ONEIA believes that facility approvals should be determined based on the type of technology that is being utilized. Standards for compostable products are a separate issue that can be addressed through a task force or working group. We strongly believe the Province should not be prescriptive in the approvals process about the type of compostable products and packaging that can be accepted as we believe that the treatment of these materials is the secondary goal and the focus should be on the diversion of food and organic waste from landfill.

Recover the Value of Resources

ONEIA agrees with the Province that the priority should be on the reduction/reuse of waste that is created in the Province. These materials should be viewed less as a waste and more as a resource as outlined in the waste hierarchies that are widely used in the industry. In relation to the materials for technical and economic reasons, we believe the Province, through the producer responsibility approach, should work with product/packaging producers to minimize the production of complex combinations of material that make recycling too costly or unfeasible.

ONEIA is supportive of thermal treatment including the concept of co-firing materials to lower the carbon intensity of large emitters when resources can otherwise not be recovered. We believe that Province needs to work closely with the industry to assess the highest and best use of the various materials in the waste streams to ensure that we are diverting it to the appropriate outlets. This assessment should address the entire supply chain including the production of the materials.

In the case of new, innovative companies, we believe that the Province needs to support the adoption of these type of technologies. This requires efforts to address the modernization of approvals, clearer definitions of when a waste becomes a resource (and why it is defined as a waste at all), innovative approaches to local and provincial permitting as a technology scales up, funding programs to support the commercialization of the technology, etc.

ONEIA agrees with the Province as it relates to the development of products that can have a beneficial use. As outlined in the Discussion Paper, the promotion of soil health, crop growth and carbon storage are some of the key aspects that need to be considered. The production of renewable natural gas (RNG) and various forms of renewable fuels from our waste streams is vitally important and can support our efforts to displace higher carbon intensity fuels and support the Province's efforts to reduce GHG emissions. RNG could support the reduction of emissions from heavy duty vehicles. We believe the Province should support the conversion of heavy-duty truck fleets that return to base every night (e.g. solid waste collection vehicles, municipal transit, school buses, etc.) to use compressed natural gas/RNG due to the economic and environmental benefits. Various other jurisdictions have completed studies in this area and the merits of such conversion are considerable.

Regarding soil health and impacts on waterways, ONEIA members believe that non-point source loading to our waterways requires further focus including how we can bolster agricultural soil health to support our agricultural sectors, including those surrounding Lake Erie and Lake Simcoe. We believe that nitrogen and phosphorous loadings to these waters requires further management which can be achieved through the development of soil carbon reserves. The use of organic matter found in our organic waste streams and biosolids streams can rebuild these reserves, leading to higher crop yields, lesser runoff and a reduction of nutrient flow into our waterways. A specific example of this would be a tie-in with the Healthy Soils initiative that was outlined by OMAFRA last year. It references compost, digestates and other soil amendments such as municipal and industrial biosolids that could be useful for building soil carbon and redistributing the nutrients to locations that need them for crop production (Pg. 22 - http://www.omafra.gov.on.ca/english/landuse/soil-strategy.pdf).

We believe that incentives could be developed such as organic by-product use tax credits such as \$10/tonne for every tonne of organics by-product used to help offset the costs for the hauling of the nutrients from urban areas to rural ones. Such measures could complement existing supply chains and the tax credit could vary depending on the priority areas (e.g. prioritizing the Lake Erie watershed). The tax credit would be agnostic in terms of organic materials as well as use in an agricultural or industrial

setting so as not to distort the market by favouring select organic products. We would also likely need to look at cost-sharing for organic by-product storage in these areas as most cash crop farmers do not have the infrastructure to manage materials that would be produced year-round and would need to be made available at appropriate times for field use.

In relation to the questions that the Province has posed, ONEIA believes the following:

- Whether Ontario should recognize additional recovery approaches as an alternative to landfill: ONEIA believes that the Province should recognize these recovery approaches as we believe that the various approaches will have a role to play in an integrated waste management approach. This may include a review of the European Union's "Other Diversion" category which would keep it distinct from traditional diversion. We would also ask that MECP reclassify diversion, so it is not treated as disposal.
- Whether certain types/uses of thermal treatment technology should count as waste diversion: ONEIA believes that thermal treatment technology should play a role in our waste hierarchy. However, the type of treatment and the products that are produced will require further discussion as some approaches do not necessarily lead to better outcomes than utilizing our landfills in Ontario.
- How Ontario's regulatory and approvals framework can support greater adoption of chemical recycling and thermal treatment while still ensuring that these technologies meet Ontario's stringent air standards and waste management requirements: ONEIA believes that the Province needs to continue modernizing its approvals process to facilitate the adoption and necessary upgrades of waste processing infrastructure. The framework needs to assess the risk of the process as well as the tonnage and type of materials that are proposed for processing, the duration of the pilot, demonstration or commercial-scale of the facilities as well as the outputs from the processes. The Province also needs to work closely with the industry and municipalities to ensure that this type of infrastructure can be developed in the Province has some of the most stringent emissions standards. In the future, we would ask that the Province periodically review them to ensure that the changes are accompanied by an impact assessment to determine whether treatment options are available to meet the standard and how a change would affect existing businesses.
- Lessons learned from other jurisdictions to see how thermal treatment has been incorporated into their waste management practices: ONEIA is supportive of the Province assessing and adopting lessons learned from other jurisdictions whether this relates to thermal treatment, mixed waste processing, innovative risk-based permitting approaches, pooled financial assurance, etc. Our members work across many jurisdictions and are willing to work with the Province to utilize their experiences to bring the feedback back to the Province for adoption as we move forward with waste diversion efforts.

ONEIA welcomes the Province's attention to Brownfields and soils issues in the context of the Environment Plan and this Discussion Paper, noting that it builds on the progress Ontario has made over the past five years with respect to establishing expectations and a draft regulation around the issue of appropriate management of excess soils. Collaborative efforts by ONEIA and MECP have begun to allay public concerns about illegal dumping and/or misrepresentation of the quality and safety of excess soils offers the opportunity to continue this work.

ONEIA member companies believe that the Excess Soils Regulatory package has wide stakeholder support. These stakeholders strongly support the release of the regulation at the earliest opportunity, given the assumption of a fair transition period of up to three years for its more complex aspects. Such an implementation would offer a significant opportunity to reduce "red-tape" and to streamline the excess soil implementation system. While the technology exists to continue to support the redevelopment of

these sites in a cost-effective manner that is protective of human and ecological health, we require specific changes in regulations, policies and approaches to make this happen, namely:

- The current proposed amendments to Ontario Regulation 153/04 will greatly reduce the burden and uncertainty associated with getting an RSC in place to support the redevelopment of these sites; in particular, the variance on full delineation for risk assessed sites and the modifications to the regulation related to salt impacts associated with winter safety are important burden reduction measures that should be put into force as soon as possible;
- MECP's current approach to addressing soil that has a pH outside the "accepted" range should be revisited; options beyond additional sampling to average out values (not always practical), soil removal (which generally promotes unnecessary soil movement activities), or application of Table 1 Standards (prohibitive for delineation and increases redevelopment costs due to soil importation requirements) are needed. In many cases, this approach leads to soil removal to avoid application of Table 1 – even if there is no evidence that the locations with soil pH outside the allowed range are causing issues at the site or the pH issue is extensive. The regulation should have options that would allow for more soil to be left in place if there is a good technical rational to do so. Blanket rules that encourage the removal of soil without any technical consideration don't really align with MECP's goal of preventing unnecessary movement and unnecessary landfilling of soil;
- MECP should reconsider the blanket requirement for RSCs on upper floor levels of existing highrise buildings when they are converted from commercial to a more sensitive use. Vertical spaces that are not in contact with the ground surface and may be individually owned have specific challenges for obtaining an RSC, including access to sampling at ground level. Perhaps the requirements for obtaining an RSC should be specific to spaces that are in contact with the ground surface since it is only these spaces in which access to subsurface contamination can truly be controlled; and,
- MECP's recent redefinition of volatility is problematic as it leads to the inclusion of multiple parameters as "volatile" that cannot truly be measured in the vapour phase and would not be expected to be observed in the vapour phase. The inclusion of these additional parameters as "volatile" could easily mean significant added costs to the brownfield redevelopment program as it will necessitate multiple additional sampling apparatuses and processes under Certificate of Property Use (CPU) monitoring programs for potential inhalation risks. MECP should reconsider the validity of the revised definition and evaluate whether the extra level of protection introduced by this new definition actually adds value to the process (i.e., are we truly improving our protection of receptors by applying this definition), or just increases the cost burden of the process for no discernable gain.

1. What role do you think that chemical recycling and thermal treatment should have in Ontario's approach to managing waste?

ONEIA believes that resource recovery technologies are critical to releasing the trapped value of resources and in extending the life of these materials beyond a single use and returning them into a circular and sustainable economy. ONEIA members have found that various municipalities do not have cost-effective access to a broad array of diversion resources. For these areas, a broad recovery option may be the most robust solution and fit to their needs, thereby addressing all waste management needs in addition to providing a distributed power source. Thus, allowing a broad range of materials to be recovered protects against unreliable foreign recycling end markets (such as China, India and Indonesia) and the material can be diverted to recovery. We believe that it is an "and" rather than an "or" when it comes to the various processing options for our various waste streams. Therefore, we believe that they should fit into the hierarchy as it relates to extracting the value from these resources. We also believe that materials best suited for recovery are those that cannot otherwise be diverted for technical and economic reasons.

2. What types of waste materials do you think are best suited for thermal treatment?

We believe that complex and difficult-to-recycle waste materials are ideal feedstocks for recovery in a circular economy. In Ontario, we have companies that are seeking specific materials in the waste stream to produce higher value products. Therefore, materials that may have been perceived as a waste may instead be highly recoverable and convertible resources that can supplant virgin resources in the production cycle, thereby conserving energy, resource extraction costs and lessening the environmental impact of waste management and production. The other concept is the treatment of complex materials that are not recoverable by other means and the Province is seeking to manage these materials in a different way other than landfill. In this case, ONEIA is supportive but does not necessarily see this as an alternative to landfill.

3. How can we clearly and fairly assess the benefits and drawbacks of thermal treatment?

Thermal treatment is a broad category as it relates to waste processing, as it could refer to a range of options from solid waste incineration to gasification or pyrolysis of plastics. Further discussion with MECP is required, as the benefits and drawbacks differ significantly depending on the feedstocks and the processes that are being considered and the outputs of these processing technologies. This discussion would include a comparison using a science-based, life-cycle assessment of the recovery of the waste resource through recovery processes and would provide a comprehensive understanding of the advantages and benefits of thermal treatment. It would include several factors that need to be weighed and balanced when evaluating post-use recovery processes, such as:

- Retaining the highest inherent value in the material being recovered;
- The net energy requirements to recover post use value;
- The net environmental impact of recovery processes;
- The net economic impact to the community; and
- The sustainability of the process.

4. Are there obstacles in the current regulatory requirements and approvals processes that could discourage the adoption of technologies such as chemical recycling and thermal treatment? How can we maintain air standards and waste management requirements in addressing these obstacles?

ONEIA believes that there are many obstacles as it relates to the current regulatory requirements and approval processes for all waste processing infrastructure. We believe that the Province needs to work closely with the industry on the modernization of the approvals process, timelines to complete more complex ECA's, D-series guidelines for the development of this infrastructure, the development of pilot and demonstration scale ECAs that allow new, innovative processes to be tested within the Province, and the land use planning that facilitates where this infrastructure can be developed and supports economic development and job creation throughout our province.

We agree with the Province that we need to maintain air standards and waste management requirements in addressing this type of infrastructure. We would work collaboratively with the Province to assess the risk/complexity of the technological approach and how to maintain the tracking of materials. However, further dialogue needs to occur with the Province as it relates to when a waste becomes a resource.

5. How can we best work with municipalities and stakeholders to integrate new soil reuse rules and other best practices into operations quickly, and to continue to develop innovative approaches to soil reuse and management?

ONEIA agrees with the Province that it needs to work closely with the municipalities and other stakeholders to address land use planning guidelines as well as new soil reuse rules. We believe there are five areas where details need to be confirmed with respect to how the regulations would be implemented and applied:

Enforcement: Under the new definition, excess soil is classified as a "waste" unless the management procedures outlined in the proposed regulation are fully followed. This is a process that Ontario stakeholders need to better understand. Proper enforcement of the regulation will be key in establishing public confidence in the program as well as acting as a potential deterrent to those who would consider violating the standard. Further, identifying who will be responsible for enforcement, making enforcement easy to administer, and ensuring that enforcement is heavily punitive to act as a deterrent will be keys in the enforcement aspects of the Proposed Excess Soil Regulation.

Clear Responsibility: As the proposed regulation generally places responsibility for ensuring the quality and appropriate use of the excess soil on the generator, we will need further clarity on responsibilities for monitoring the program and identifying potential issues. A clear and consistent understanding, as well as effective and consistent communication, is needed between the local level representatives from municipalities and conservation authorities in collaboration with MECP.

Simple Registration Process: Qualified Persons (QPs) will benefit from a simple on-line registration platform. Comparators would be Ontario's Hazardous Waste Information Network (HWIN) system and the Environmental Activity and Sector Registry (EASR) process. Such a system would not require every detail with respect to the site/transaction but merely those required for monitoring and enforcement. Mandatory linkages for both generator sites and receiver or reuse sites to access the registry should be developed to ensure any loops can be closed and the ultimate destinations for excess soil can be tracked and recorded. Further, limiting the ability to modify information posted to QPs (similar to filing an RSC) with appropriate certifying statements by the project QP and the project leader (defined as possibly the owner, developer, constructor, general contractor etc.) would provide assurances for the integrity of the registration site. Modest registration fees based on expected excess soil tonnages would cover the costs of administering and maintaining the online registration platform and database.

Qualified Person's Reliance: The proposed regulatory package relies heavily on Ontario's Qualified Persons, necessitating a QP registry process that will allow for identification, tracking and communications, as well as possible enforcement. Further, mandatory training and education programs need to be established for QPs to achieve and maintain their designation, but more importantly, to ensure a high and standardized level of practice in excess soils management in addition to site assessment and remediation. The program could be administered through an existing provincial body with partnerships with the two base Regulators of QPs (PEO/OSPE and APGO). Registration of the QPs would provide a streamlined process for any enforcement and the registry database. Modest registration and annual fees for the QPs would cover the costs of administering and maintaining the QP registration program. Further, "pay-for-use" certification and training programs would assist in cost-recovery.

Promotion of Local Reuse: Promoting (and incentivizing) local reuse of excess soils will reduce truck traffic, long distance haulages and wear-and-tear on roadways, with commensurate positive impacts on reduced GHGs. Soil banks and fill campuses established by private industries and/or public-private partnerships with municipal governments could assist in the local reuse opportunities. As an example, establishing soil banks and excess soil processing sites in existing and closed aggregate quarries and pits would allow for these often-underutilized facilities to be used for a higher purpose. Further, these facilities have established truck traffic plans and often could provide full two-way loads (excess soil to the quarry and aggregates out of the quarry), creating transportation efficiencies for the existing truck traffic and reduction of the overall GHGs produced. Ensuring that the "red-tape" surrounding proposals is reduced will be key to promoting local reuse.

ONEIA also believes that many high-quality topsoil/ AA compost blends which would have beneficial use for soil remediation exceed the testing parameters set forth in the regulation. We suggest that MECP develop permitted uses based upon contamination level for soil-like materials to allow for potential reuse and/or disposal options. Other jurisdictions within Australia, the United States and Canada (i.e. British Columbia) have developed classification categories that could guide this process within Ontario. Excess soil and soil-like material (i.e. top soil/ AA compost blend) with contamination levels that meet updated standards could be permitted for beneficial uses such as site remediation, inert fill, quarry reclamation and landfill cover.

Finally, ONEIA members are pleased that the Province identified in the Environmental Plan that the hauling of sewage or septage is an area of importance to protect our local environments and waterways. It is important to note that with the introduction of the Nutrient Management Act (NMA) in 2003, septage was excluded for direct land application due to the non-treatment of inorganic and pathogens contained in the materials. The hauled sewage program approvals were left with the MECP as this practice was more seen as waste disposal than nutrient management. The intent was a 5-year phase out of approvals. In 2011, the Non-Agricultural Source Materials (NASM) regulations continued the exclusion of septage from land application.

The phasing out of land application was never met due to many factors but mostly the lack of infrastructure to handle the material. We believe that the Province's Organics Framework should include recommendations on the collection, processing and storage of septage.

ONEIA would be pleased to offer its assistance on the development of options for the collection, processing and storage of septage to better protect human health and the environment.

Support Competitive and Sustainable End Markets

Through the reduction of waste and increased diversion, additional processing/disposal infrastructure is required and end-product outlets in the Province and more broadly are required.

We support the establishment of a circular economy that is supported by a sustainable materials management systems approach to using and reusing materials more productively over their entire life cycle. By taking a holistic approach to the lifecycle of products and packaging, a sustainable materials management framework compliments a circular and sustainable economy.

Additionally, beyond the issue of landfill siting, the Province needs to ensure that municipalities will not preferentially favour their own assets over those in the private sector. We require transparent rules surrounding permitting a site for of this type of infrastructure and support actions that are outlined in the Organics Framework for standardizing designs and proper land use planning. As an example of land use planning, we would suggest looking at the existing provincial policy statement regarding land uses and consider how organics processing facilities could fit into the agriculture-related use portion. It would likely tie well into minimum distance separations (MDS) and the Nutrient Management Act (http://www.omafra.gov.on.ca/english/landuse/facts/permitteduseguide.pdf). We understand that the Province may revisit this for a municipal perspective in the Organic Framework, but we expect that we would have an overlap with the Provincial Policy Statement outlined above. We believe that the Province needs to provide guidance to smaller rural communities that would be good candidates for facilities and have found that M1 and M2 zoning could fit well but currently they have exclusions for allowing this type of infrastructure.

1. What changes to the approvals process do you think would best facilitate a reduction in waste going to landfills?

ONEIA has worked collaboratively with MECP on the modernization of approvals process in the past and will continue to do so. We have provided specific suggestions as it relates to organics processing infrastructure and can provide similar feedback to MECP as it relates to other infrastructure that would facilitate a reduction in waste going to landfills. In general, the modernization of the approvals process should include:

- Streamlined and faster review times along the approval process for both current operations and pilot projects to shorten the time to market for existing and new, innovative technologies;
- Review by technically proficient staff, such that innovative technologies are not lumped under the same categories, and with the same restrictions as 'familiar' technologies (i.e. conversion

technologies vs mass burn incinerators – not all 'thermal' is created equal, they are not the same category); and

 Risk-based permitting approaches that allow for shortened review times for smaller volume sites that manage lower-risk materials similar to California's approach to green waste composting sites

2. What type of end markets for resources from waste do you think Ontario is best positioned for?

Ontario is well-positioned to provide end markets for recoverable waste materials from non-recycled plastics to organics and mixed, complex and contaminated waste. Ontario is also a world leader for numerous conversion technology firms seeking feedstock, permits and access to the Ontario market as they move forward to commercialize their systems. With more than 16 million people living within a 350 km radius of Toronto, there is a large potential supply for feedstock and local product marketing (independent of variable overseas markets). Therefore, ONEIA believes that the Province can play a role in encouraging a variety of end markets for resources that have been recovered from waste. Prime examples of this are the compost and digestates from organics and biosolids processing infrastructure. In our response to the Made-in-Ontario Environment Plan and as discussed earlier, we proposed a healthy soils approach that could facilitate the adoption of these products by farmers that are seeking to improve levels of soil carbon. We also believe that the Province should address government procurement rules as it relates to these types of products.

We would like to stress that the private sector has the capital, experience and knowledge to bring new and innovative technologies to the Ontario market and can help transition Ontario to a low-carbon economy. A prudent and responsible use of public resources to incent private sector investment will help foster the development of innovative technologies to drive reductions in organic waste streams at the lowest cost to taxpayers.

Open and competitive markets allow for the development of dense collection networks, which in turn drives higher productivity while maximizing internalization opportunities. This environment helps de-risk investments in new processing and storage infrastructure. Investment capital flows more readily to those jurisdictions where it can be most effectively utilized and where the returns are the greatest.

We would add that provincial and municipal governments have the opportunity through their existing procurement programs to stimulate the development of processing technologies and end markets to create pull for organics-based materials. However, one of the critical issues that often arises when governments attempt to stimulate new markets is, they support specific approaches and technologies through legislation, regulation and/or public policy. It is better to create a public policy environment that encourages and incents a broad range of providers to adapt as well as attract new investment and technologies to respond to evolving market needs. Policies and regulations should not be prescriptive and/or focus on a specific type of technology, material or service, but rather focus on the desired outcomes while ensuring environmental protections are in place.

It has been proposed that incentives be developed such as an organic by-product use tax credit for every tonne of organic by-products utilized. The tax credit could be used to help offset the costs for the transportation of the nutrient-rich materials from urban areas to the rural environment where the need is greater for these materials. It is recommended that any consideration of a tax credit must be agnostic in terms of approved organic materials as well as use in an agricultural or industrial setting, so as not to distort the market favouring select organic products.

We are supportive of ensuring that products created from organic waste processing facilities meet high standards and are utilized beneficially in a manner that is suitable for their use. As outlined in the Soil Health and Conservation Strategy for Ontario, our soils need organic content. Additionally, there is significant opportunity to utilize organic waste as a resource for energy generation. MECP can work in

tandem with existing efforts to increase the value of end products, thereby making organic waste recovery more feasible.

To further align the goals set forth in the Organics Framework, we recommend the following:

- **Compost Quality:** The Province has developed Compost Quality Standards that ensure high quality end products are produced from composting. MECP will need to ensure that this is not lowered as it ensures that efforts are made to improve soil health/soil carbon.
- Digestate Standards: Digestate, (liquid or solids that come out of the AD process) are high in organic matter and nutrient value. The feedstock for ADs and composting processes consist of organic waste which are both suitable to be land applied after undergoing each respective process. Therefore, developing standards for digestate uses, similar to the Compost Quality Standards that outline quality parameters would encourage sustainable practices for both products. Compost and digestate provide valuable nutrients for the agricultural industry. However, stringent environmentally protective standards apply for the production of compost and beneficial uses, whereas, digestate is minimally regulated in comparison. Digestate products that are of consistent quality as it applies to moisture parameters, foreign matter including sharps and the overall process would allow for product certainty in the marketplace. ONEIA is a strong proponent of building on industry experience to inform changes that can help the sector grow and ensure that the material applied to Ontario soils protects human health. We ask MECP to review the gaps in regulations between compost and digestate, so they are consistent and supportive of use in proper end markets.

3. How do you think municipalities should be given more say in the landfill approvals process?

ONEIA believes that the current landfill approvals process provides municipalities with an appropriate level of input and we would not recommend any additional measures. Municipalities play an active role as a commenting agency in the official review of Terms of Reference, Environmental Assessments, and ECAs. Municipalities also have authority over land use aspects of the landfill approvals process, including Official Plan designations, Zoning By-law amendments, and Site Plan approvals. A provision of greater municipal "say" in the landfill approvals process would add uncertainty, increase red tape, lengthen timeframes, and hamper potential economic growth. The current landfill approval process has served Ontarians well.

ONEIA believes that additional municipal involvement in the landfill approvals process should focus upon creation of consistent, objective, and science-based policies that enable development of vital resource recovery and residuals management facilities in Ontario that create employment, stimulate innovation, and provide infrastructure in a cost-effective and environmentally-sound manner. Current provincial policies and legislation, including the Provincial Policy Statements and Nutrient Management Act, provide a basis for further municipal "say" on contentious matters, such as minimum distance separation and adjacent use compatibility. Focusing municipal input in this area will enhance the landfill approval process.

Measure Our Success

As outlined throughout our response, ONEIA is supportive of the Province's efforts to decrease the amount of waste going to landfill and its attempts to increase the Province's overall diversion rate. We agree that the Province needs to monitor and evaluate progress towards this goal including the reduction in waste *per capita*, reduction in GHG emissions and relying on reliable, accurate information in its decision-making process while increasing diversion. However, we would caution MECP about the use this proposed metric. As has been noted in the Discussion Paper, there is a lack of accurate information about waste in the ICI stream which constitutes the majority of waste generated in Ontario.

Current waste diversion metrics based on achieving weight-based goals do not consider economic and environmental benefits from resource conservation, material reductions, reduced energy and water use

and the reduction of GHG's released. Using established and accepted methodology by the USEPA, the sustainable materials management system is a better measurement of environmental impacts such as the reduction of the generation of GHGs and energy savings.

Being able to track these environmental benefits and better articulate how recycling drives GHG reduction and energy savings will help stakeholders along the materials chain of custody select the best option for the management of materials including its participation in the burgeoning circular economy. This would also help with the planning and implementation of provincial and regional government climate change plans.

The Discussion Paper suggests that progress review will occur every five years. We recommend that MECP work with stakeholders to develop an annual reporting mechanism that can be used to monitor and report data, including a baseline of waste that are diverted. This mechanism should consider the total amount of waste that is collected less the contaminants that are removed from the process and sent to landfill.

We want to hear from you

1. Of all the initiatives detailed in the discussion paper, what do you think should be the priority for early action?

Modernization of Approvals: Given the need to develop or upgrade a significant number of resource recovery and organics processing facilities, the significance of modernizing the approvals process cannot be understated. There is a strong linkage between the approvals required to develop waste processing capacity and the ability to divert more waste from landfill. In order to support resource recovery infrastructure, we encourage MECP to redouble its efforts to modernize the approvals process in tandem with the implementation of the key policies in this Discussion Paper and more specifically the Organics Framework. The critical linkages to product end-market regulations such as the NMA and the ECAs must also be recognized in this modernization process.

The ECA process should allow for reduced timeframe service standards and greater certainty. We commend MECP for undertaking their efforts to date and encourage the Ministry to also grant limited operational flexibility in ECAs to incentivize efficiencies and the development of new and innovative technologies. Additional efforts should be undertaken by MECP to work with industry to develop additional D-series guidance that would support the development of this infrastructure. This would also include adhering to the 1-year service standard and prioritization of files to ensure that this type of infrastructure is developed in a timely manner.

In relation to the modernization of approvals, ONEIA is supportive of the on-going efforts by MECP to address these concerns. We have previously suggested several changes related to approvals and can work closely with the Province as more focus is placed on this impediment. As it relates to the modernization of approvals and organics management solutions, the changes must reflect evidence-based, best scientific practices that address the unique challenges facing communities in Ontario. Providing information and tools to enable Ontarians to understand potential changes to approval processes and to better understand organics management challenges and opportunities is essential. Establishing clear rules for regulating activities and enforcing rules consistently is key to creating trust and confidence in Ontarians.

ONEIA recognizes that there must be guidance and standards established by the Province to ensure that effective regulatory protections are established and are maintained for emerging and expanding markets. MECP should focus on smart regulatory and policy approaches to facilitate and enable innovation, which is an essential component to lowering barriers to entry to new technology firms, greater advancements in clean energy and further establishing Ontario's cleantech sector as innovation leaders in this field.

ONEIA contends that effective approvals modernization is crucial in ensuring clean air for Ontarians and that the government's interests in protecting the environment while stimulating the economy are better served by a system of approvals that reflects the relative risks of activities based upon science and facts, building upon work done to date including the development of the Environmental Activity and Sector Registry (EASR). ONEIA members have extensive expertise and experience in various environmental approvals and are eager to share with the Province their perspectives on how to support clean air through effective, efficient and enforceable approvals for various activities in communities across Ontario.

We would encourage the Province implement the modernization of approvals process to ensure that both current operation and pilot projects have shortened timelines to commercialization and allow for more early stage investment in the Province for innovative projects related to climate change, organics management, etc. As we have referenced, the process should be outcomes-based and not a prescriptive approach.

Zoning Requirements/Land Use Planning: Municipal zoning requirements have been a significant hurdle for siting waste processing facilities in Ontario and will continue to be if efforts to accelerate the siting components of this Discussion Paper are not undertaken. Often, municipal by-laws do not account for waste processing facilities, and as such site developers are required to request a by-law amendment prior to selecting a site. In order to accelerate the development of additional waste processing facilities required, we suggest that, if a waste processing facility meets certain criteria then it should be able to move forward if a municipality has provided clarity on their expectations and subsequent timelines to provide guidance or approval. Furthermore, we recommend that facility siting is considered, and waste processing facilities are permitted under any further iterations of provincial land use-planning decisions.

As the approvals process is modernized and MECP works with other ministries to ensure waste processing facilities can be properly zoned, we ask MECP to recognize that technology continues to develop and streamline the process to allow for new technologies to obtain environmental approvals to demonstrate their viability. We also agree with the Organics Framework around updating municipal official plans on providing clarity on where this type of infrastructure can go as it provides support for municipal green bin programs as well as the attraction of new food processors and other businesses that are interested in supporting the circular economy. MECP could also provide guidance to municipalities as well as its approval staff on a risk-based guidance document for setbacks and review/oversight which would lead to a graduated approvals process.

We would also request MECP look at the issue of regionalization of waste processing infrastructure and the balance of public and private infrastructure. Members of ONEIA had seen many situations where municipalities do not assess their own infrastructure (i.e. wastewater treatment plants for co-digestion) or nearby private infrastructure that could be available to it for processing organics at a lower cost than building new infrastructure. Taxpayers have ended up paying a high capital and on-going operational costs to run smaller facilities rather than using existing infrastructure or coordinating regional infrastructure.

2. How do you think Ontario can best maintain its competitiveness and growth while reducing the amount of waste going to landfill and litter in our communities?

ONEIA believes that the importance of the existing and future waste processing infrastructure cannot be understated as the Province moves forwards mitigating and adapting to climate change. This includes focusing on the most cost-effective methods of lowering our emissions in the Province and the role that waste and source separation of the waste streams can play.

Encourage source separation over mixed waste processing

The Organics Framework states that source-separated organics are preferred over mixed waste processing. While mixed waste processing facilities may allow municipalities to achieve higher diversion rates with certain materials (e.g. paper and plastics), we caution MECP against adopting this approach

as it pertains to organics, as the experience in other jurisdictions (e.g. Europe) has shown that organics generated from mixed waste processing are higher in contamination and are not always suitable for use as a soil amendment. In many cases, the end product generated at mixed waste processing facilities is utilized as alternative daily landfill cover, thus creating a "more expensive waste" rather than a value-added product that can be sold in the marketplace.

ONEIA is supportive of ensuring that products created from waste processing facilities meet high standards and are utilized beneficially, consistent with their nutritive attributes. MECP can work in tandem with existing efforts to increase the value of end products, thereby making waste recovery more feasible

3. How do you think we can make Ontario a leader in waste reduction and diversion once again?

Recognize Resource Recovery as Diversion

Recognizing resource recovery as diversion from landfill is an essential condition for the development of current and future technologies, research and development, market development, jobs creation, and establishing Ontario as a leader in this field. If Ontario is serious about raising its diversion rate beyond currently stalled levels, resource recovery and the vast array of derived value from these beneficial resources are the fastest and most environmentally responsible route to achieve this.

Canada and the rest of the developed world is shifting to a resource recovery approach to managing waste and Ontario can be at the forefront in defining its role as a leader in developing sound public policy that will:

- Reduce barriers to entry to new technologies, investment, and research & development;
- Support resource recovery through incentivizing higher value recovery technologies over landfill;
- Providing access to feedstocks to fuel the sector;
- Mandate recycled/recovered content in products;
- Implement government procurement policies requiring recycled/recovered content, and; and
- Incentivizing the use of recovered content.

Summary

ONEIA looks forward to working with the Province to implement the "Reducing Litter and Waste in Our Communities: Discussion Paper" and the Environment Plan and to participating in consultations on the priorities and next steps. ONEIA member companies and their representatives are willing to participate in advisory panels on the Discussion Paper on reducing litter and waste in our communities. ONEIA believes it has identified the aspects of greatest importance and priority within the Discussion Paper and areas where our member companies can provide the most support. ONEIA believes that time is of the essence and we will collaborate with the Province in an expeditious manner with respect to advancements of actions identified within the Discussion Paper.

We welcome the opportunity to discuss our ideas further. Please contact Alex Gill, our Executive Director, at <u>agill@oneia.ca</u> or at (416) 531-7884 should you have any questions.

Yours truly,

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Alex Gill Executive Director



Taras (Terry) Obal, PhD, MCIC, CChem Chair of the Board and Chief Science Officer, Maxxam