

Form: Request to Speak to Committee of Council

Submitted on Monday, February 24, 2020 - 8:50 am

==Committee Requested==

Committee: Advisory/Sub-Committee

Name of Sub-Committee: Waste Management Advisory Committee

==Requestor Information==

Name of Individual: Neil Shinder

Name of Organization: End 2 End Ecosolutions Inc.

Contact Number: [REDACTED]

Email Address: [REDACTED]

Mailing Address:

[REDACTED]

Reason(s) for delegation request: Presentation of Green Dog Waste Removal System to the Waste Management Advisory Committee meeting – meeting on April 2nd at 1:30 pm at City Hall.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? No



Green Dog Waste Removal System Proposal

Presented to

Hamilton Waste Management Advisory Committee

By

End 2 End Ecosolutions Inc. (E2E)

September 22, 2020

A close-up photograph of a person's hand holding a green plastic bag on a grassy area. The hand is wearing a blue and white plaid shirt. To the left, the white paws of a dog are visible on the grass. The background is a soft-focus green lawn.

According to the Canadian Animal Health Institute, the 2018 dog population in Canada was approximately 8.2 million dogs with 41% of households having at least one dog.

On average, one dog produces approximately one kilogram of waste every three days.

Approximately 20% of this dog waste makes its way to landfill via the public park systems waste collection streams.

Dog waste in landfill environments do not biodegrade either within plastic bags (biodegradeable or otherwise) or not in bags.

With over 80,000 dogs producing over 3,000 Kilos of waste per day within the approximately 400 parks in Hamilton's park system, a large amount of Hamilton's landfill has the potential for diversion and re-purposing in a circular economy framework to help Hamilton move forward towards a Zero-Waste economy.

Dog waste is high in phosphorus, providing a natural plant nutrient for organic farmers and gardeners.

Overarching Goal

- The Federation of Canadian Municipalities' (FCM) Green Municipal Fund's strategic plan outlines approaches that support waste sector goals:
 - *Waste is avoided, recovered and reused through responsible resource management*
 - *Economic, social and environmental benefits must be realized*
- The Green Municipal Fund funds feasibility studies for waste management systems and initiatives that increase the diversion of waste from landfills for all Canadian municipal governments.
- The Waste Free Ontario Act fights climate change by reducing greenhouse gas pollution that results from the landfilling of products that could otherwise be recycled or composted.
- End to End Ecosolutions Inc (E2E) was created to adhere to these mandates.

End 2 End Ecosolutions Inc (E2E)

Neil Shinder
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(cell): [\(1\) 647-628-7567](tel:16476287567)

- Entrepreneur motivated by a passion for the planet and a love of dogs.
- Guided by the principles of a circular economy approach of reuse, recycle and responsible waste management.
- Graduated in 1985 with a BCOM Honors and a CA designation in 1986.
- Senior executive positions focused on financial management and large-scale office space.
- Principal owner in large commercial real estate and property management firm.
- CEO and co-founder in three highly successful global product offerings that redefined the beauty industry.
- Active community member and volunteer since the early 80's.

New Green Solution

Transforming Solid Waste Management

- An innovative aid in the elimination of environmentally harmful single use plastic bags used in the pickup of dog waste.
- A unique system that diverts the dog waste stream generated from the public park systems that is currently going to landfill, reducing Hamilton's carbon footprint.

Product Offering

Dog Waste Pickup Tool

E2E utilizes a user-friendly proprietary dog waste pickup tool that does **NOT** use or require plastic bags or the use of **ANY** bags for the pickup of dog waste.

Pickup tool can be used for multiple pickups in one emptying process.

Dog Waste Management System

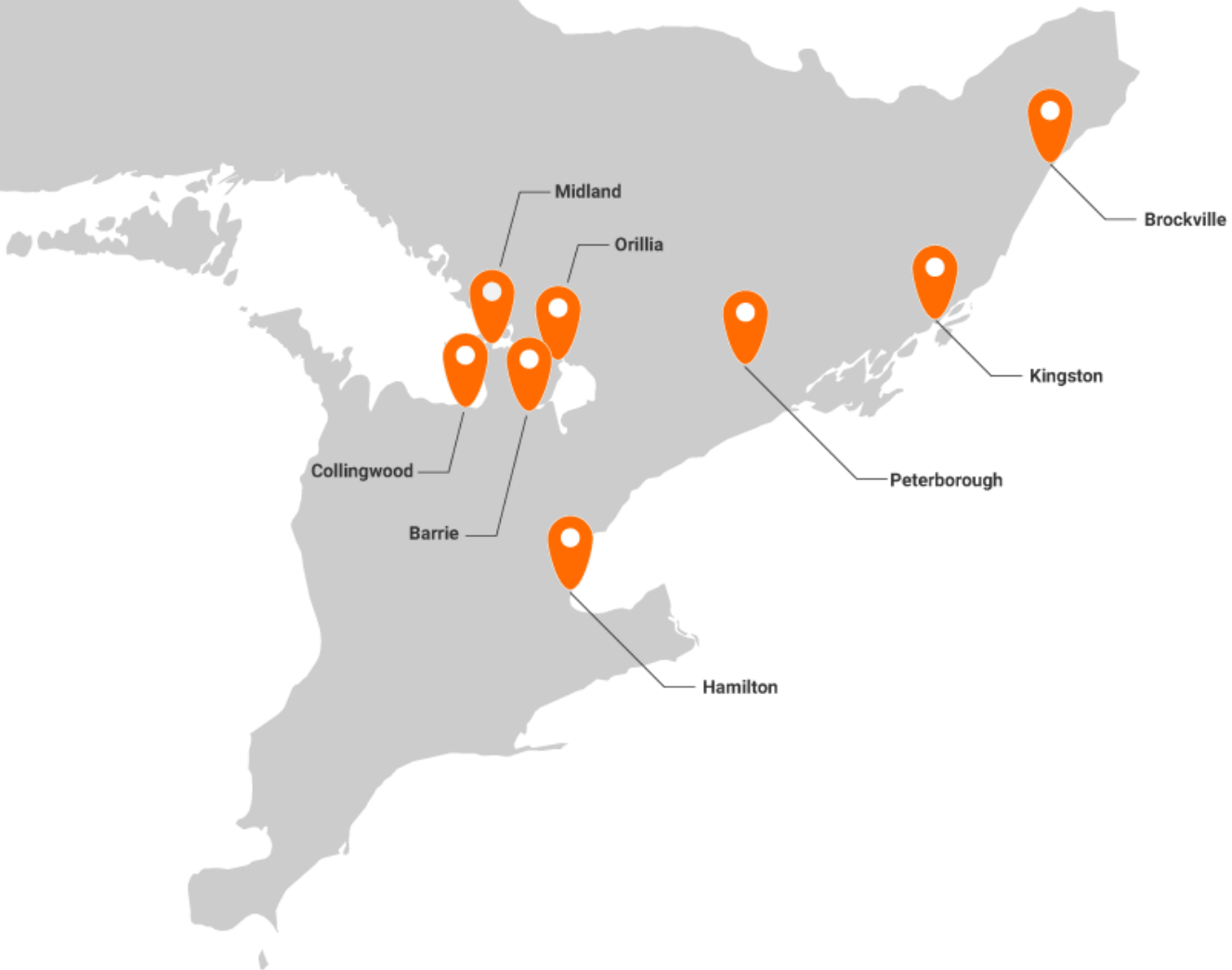
Contents of dog waste pickup emptied into proprietary **E2E** park waste bins and picked up on a weekly basis.

Waste moved outside the municipal area and utilized in a vermicomposting environment (worm facility).

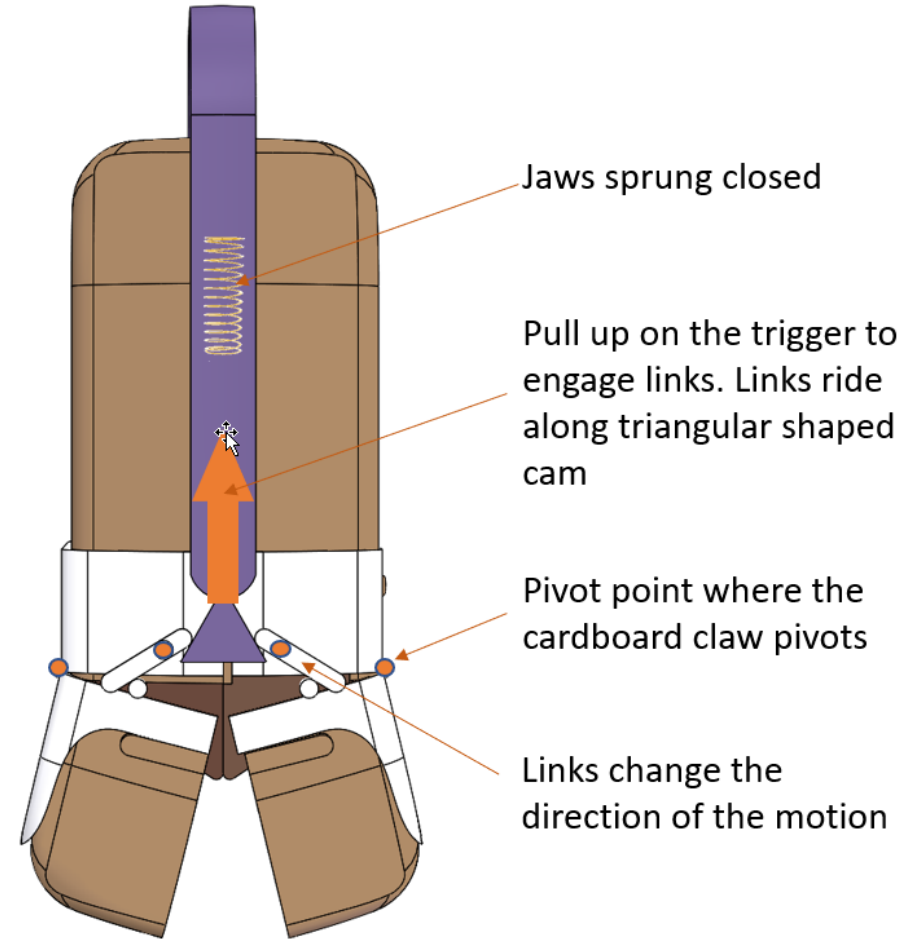
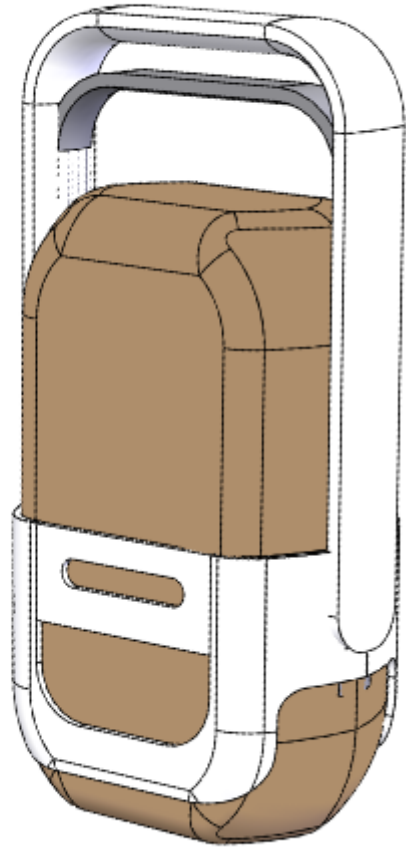
Benefits

- Cost reductions through diverting and reducing landfill waste.
- Creates sustainable compost available for use post environmental testing. This compost can be utilized in the Hamilton park system to bring this process full circle.
- Minimal alterations to existing operations.
- Multiple health benefits with minimizing exposure to fecal coliform bacteria.
- Reduces harmful single use plastics and landfill usage.
- Advanced thought leadership in municipal waste management and green initiatives.

E2E currently in discussions with the following cities:



Dog Waste Pick up Tool



Dog Waste Pickup Tool



Municipal Bin

*routed plastic panels
(0.5" coloured HDPE plastic board)*



key cam lock

*adjustable height feet
with mounting plates*

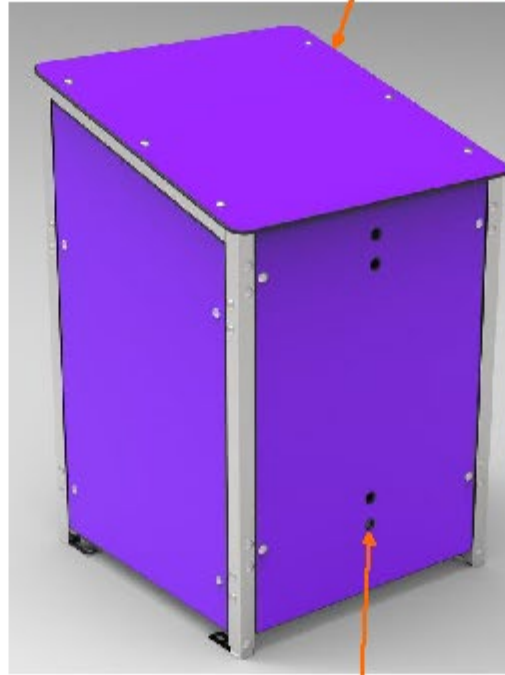
bolt hardware

access door handle

*tie-down holes
(would be horizontal)*

*square tubular
steel frame
(painted or stainless)*

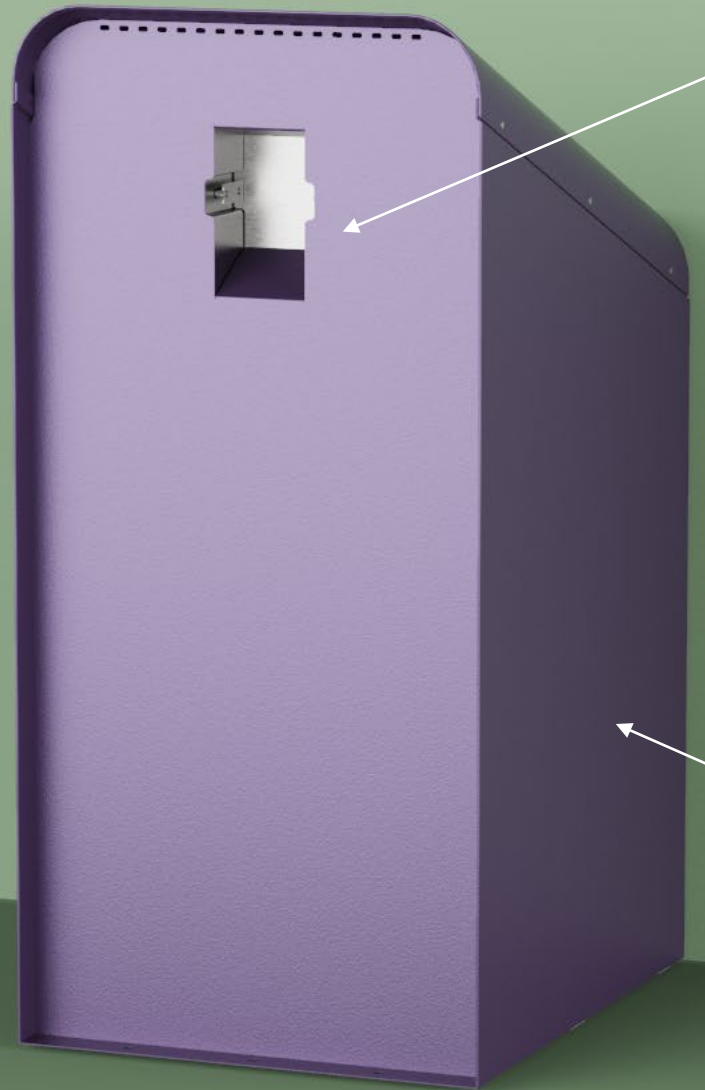
*top panel with
overhang*



*pulp pod interlock
mechanism / pod
stripping mechanism*



Dog Waste Management System













Design works seamlessly with waste pickup tool

Elegant sheet-metal frame, designed to fit in with communities.

Vermicomposting Process

From collection to compost

Collection	<p>Earthworm Casting  Earthworm can be collected by observing earthworm's casting</p>
Construction of Vermibed and compost pit	<p> Vermibed  Compost pit</p>
Separation of earthworms and solid waste	<p> Vermicompost heap  Meshing</p>
Packaging	<p> Packaging and labelling</p>
Transportation and Marketing	<p>  Green house plant  Plant nurseries  Gardeners</p>

Process of Vermicomposting



E2E wants to be part of the solution

- Landfills emit roughly 20% of all Canadian methane emissions and are a significant contributor to global climate change.
- The more we produce, the costlier it is to manage.
- Ecofiscal solutions are essential to our economy and future.
- E2E invites the Hamilton Advisory Committee interest in submitting a joint application for a feasibility study under the FCM Green Municipal Fund, or any other applicable funding model, to divert municipal solid dog waste from your landfill.
- E2E invites Hamilton Advisory Committee interest to conduct a pilot test of several locations to demonstrate the intended approach for large scale deployment.

**Thank you for
taking the time**

Questions?