

Pitching plans for waste disposal

The plant Toronto hired to process plastic closed, leaving cities looking for ways to reduce, recycle

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A recycling plant that's key to Toronto's new garbage strategy has closed unexpectedly, throwing part of the city's ambitious trash diversion plans into limbo.

The Canadian Polystyrene Recycling Association in Mississauga announced it was suspending operations just two weeks after Toronto began rolling out its mega blue bins.

The large-capacity blue boxes were purchased to accommodate the addition of polystyrene and plastic bags to the residential recycling program next fall. All Toronto homes will have one by spring.

The closing has also sent Peel Region and Hamilton, which already recycle these materials, scrambling to find alternatives. These plastics may end up being sent to landfills.

Foamed polystyrene, a plastic resin, is used for food containers and packaging electronic equipment.

While the total weight of polystyrene tossed out by GTA residents is small, the volume is huge. One kilogram of polystyrene packaging fills more than two household garbage bins. Hamilton collects about 3,000 kilograms a year.

The plant, the only recycler in the province big enough to take Toronto's expected volume of polystyrene, had just invested \$300,000 in state-of-the-art sorting equipment. But in a statement, the company cited declining revenues as the reason operations were halted.

"Our polystyrene market just went south," said Steve Whitter, Toronto's director of transfer, processing and disposal of solid waste. "Obviously it's a setback.

"When Toronto gets into something like film plastic or polystyrene, they will very quickly swallow up all the available capacity that's in the marketplace because we're just so much bigger than everyone else."

For now, the city intends to accept polystyrene and seek another market. "Normally, there's a backup," said Whitter. "Someone comes out of the woodwork who's interested in taking the material if there's a need, and there's clearly a need."

The closed plant has been recycling Peel's polystyrene for years.

Its failure is "indicative of the whole issue" of plastics recycling, said Andy Pollack, Peel's director of waste management. He said companies should only use plastic packaging if they can ensure markets are in place to recycle it. Last year, only 20 per cent of Ontario's plastic packaging was recycled.

"Municipalities are at the end of the line. We have to manage what packagers and retailers decide to use so we're constantly trying to figure out – out of all this plastic packaging – what is recyclable and what's not," he said. "It's a big challenge for us."

Cities can't add items to the blue box mix that don't have a market at the other end.

"Someone out there has to say, 'I'm a company that recycles plastic and I'm willing to take this type of plastic.'"

In two years, Michigan's landfills will close to Ontario garbage, and all regions need to grapple now with ways to reduce, reuse and recycle. Forty to 50 per cent of all waste in the GTA, including organics, yard waste and recyclables, is diverted from landfills, but municipalities hope to increase that to 60 to 70 per cent in a few years.

Toronto has an ambitious diversion plan underpinned, ironically, by its purchase of a landfill near St. Thomas, Ont. – an investment that clarified for city officials how important it is to keep waste in check.

"If we simply continue to use (the St. Thomas landfill) at the current rate, it will fill up by 2024," said solid-waste manager Geoff Rathbone. With the new diversion plan, the city can use the landfill it bought for \$220 million for another 10 years, until 2034.

That's why the city wanted to add high-volume polystyrene and bags to its program in the first place. "We're given a certain number of million cubic metres to fill, and then it's full," Rathbone said.

The city is also introducing a pay-as-you-go plan that will force residents who put out bigger volumes of garbage to pay more. It plans to build two new processing centres for organics, six new reuse centres and a mixed-waste processing plant. The project, still in its infancy, would treat waste to reduce it before it goes to landfill.

Not everyone is ready to follow. Durham officials considered building a mixed-waste processing plant, but a tour of a Dutch operation convinced them otherwise.

"Think of breaking open bags of garbage and then spinning them around, trying to extract the odd bits and pieces that might be recyclable," said works commissioner Clifford Curtis. "It's almost an inhuman place to work. We went in and we might as well have thrown our clothes away when we got out. The smell got in everything."

Curtis also has had doubts about adding plastic bags and foam to Durham's blue box program.

"There are just some things that we can't recycle because there is no market for it, such as plastic film and polystyrene foam," he said. The bags are used to make plastic lumber, but "it's a really, really thin market and it's not stable," he said.

The two items are also difficult to sort at the recycling plant. Foam breaks up easily and often clings to other material because of its static properties, while bags fly around and are difficult to pull manually from fast-moving conveyor belts.

Though Peel has been taking plastic bags for years, the region is starting a campaign to persuade residents not to put loose bags into the box. In plants with automated machinery, the bags get wrapped around anything that is spinning, so they're a constant maintenance issue, said Pollack, who would like to see retailers collect bags instead.

Despite the challenges, Curtis thinks the next two years will be "a time of great opportunity."

"People are finally grasping the concept that we can't keep throwing our garbage into the ground and they are trying to divert to save resources. And people are willing to pay a premium to do that," he said.

"They are trying to do the right thing. I think that's very encouraging."

PLANS BY REGION

Peel Region

Has a 20-year contract with Algonquin Power in Brampton, the only residential waste incinerator in the province. The privately owned company incinerates half its garbage, with the remainder currently going to the Pine Tree Acres landfill in Michigan. Once that's closed, the region's garbage will go to Warwick Landfill near Sarnia, Ont. An environmental assessment approved the landfill's expansion. Its use is still waiting on a certificate of approval, which should come in the next two years.

Halton Region

Hopes to reach 60 per cent diversion by 2010. Increased diversion rates will extend the life of the Milton landfill by seven years, until 2030.

In April, it will add a green cart program for food waste. Blue box collection will change from every two weeks to weekly. Garbage collection will change from weekly to every other week.

Durham Region

The region wants to build an energy-from-waste facility, similar to Algonquin Power in Brampton, which incinerates half of Peel's garbage and creates electricity. The proposal, slated for a site in Clarington, Ont., near Oshawa, is undergoing environmental assessment. "It's theoretically possible, if everything goes right, to be ready by 2010," says Clifford Curtis, works commissioner in Durham Region.

York Region

The region is building a plant in Vaughan that will turn garbage into energy pellets, which Andy Campbell, York's director of waste management, says look like dense goose droppings. The pellets can be burned in boilers, approved for use in Ontario greenhouses.

The region is also investing in Durham Region's proposal for an energy-from-waste plant.