

## **CEAC Report 2006-03**

Report to: Mayor and Members of Council

From: John Abbott, Chair, Caledon Environmental Advisory Committee (CEAC)

By: Town of Caledon Waste Management Sub-group: Bill Wilson, John Abbott, Pete Paterson, Bryon Wilson

Date: June 4, 2006

Re: **Adequacy of Current Comprehensive Solid Waste Management Practices Affecting Caledon**

### **RECOMMENDATIONS**

The Caledon Environmental Advisory Committee (CEAC) recommends to the Corporation of the Town of Caledon:

1. That Council receive CEAC Report 2006-03
2. That Council review the document attached as Appendix "A" to this report which is intended as a resolution to the Province of Ontario, and, if acceptable to Council, forward the resolution to the Province, The Association of Municipalities of Ontario (AMO), the Leader of the Opposition Caledon MPP John Tory, and the network of other Ontario Environmental Advisory Committees.

### **INTRODUCTION**

For several years, the Region of Peel has made great strides in residential waste recycling. With composting service being extended soon into Brampton and Mississauga, Peel promises to divert a further significant percentage of its waste stream from landfill. Yet, recurring news that the Greater Toronto Area (GTA) solid waste, including Peel's, might be blocked from haulage to, and disposal in, Michigan has caused Caledon residents to remember difficulties 10 years ago when the Provincial Interim Waste Authority attempted to locate a solid waste landfill site in Caledon. As a result, on December 2005, CEAC recommended the following Work Plan Item in its Annual Status Report to Council:

"Review adequacy of current comprehensive solid waste management practices affecting Caledon with respect to waste diversion and landfill and to determine if Caledon and Peel Region are maximizing waste diversion to avoid the necessity for increasing landfill capacity in Caledon and Peel Region." Caledon Council approved this as CEAC's Work Plan Item #28.

## BACKGROUND

On February 27th, CEAC Waste Management sub-group met with Council during a workshop session and was given leave by Council to submit a number of questions to Peel Region Waste Management Department.

On March 27<sup>th</sup>, CEAC met with Andrew Polluck and several Town of Caledon Councillors at Town Hall to further discuss these questions and answers. At the March 27th meeting it was generally agreed that a basic problem was current lack of provincial leadership in developing diversion methods with private stakeholders under the Waste Diversion Act. Council members noted that previous Peel Region requests made in response to the Province's 2004 Waste Diversion discussion paper, and other Region resolutions to the Province requesting more leadership, had not been successful with respect to Provincial follow-up on designated items under the Waste Diversion Act.

However, Council members seemed to be in agreement that a CEAC resolution to the Province, copied to the AMO, the network of other EAC's, and to opposition leader and Caledon MPP John Tory might be of assistance in furthering more appropriate leadership and action. Council members present agreed that the current situation in which growing ICI (Industrial, Commercial, Institutional) waste was creating greater pressure for landfill would eventually increase pressure on Peel Region to seek more landfill space for its remaining residential waste, especially if provincial leadership to divert more ICI waste was absent. It was noted that landfills were a permitted use in the Caledon Greenbelt.

On April 13, CEAC members Bill Wilson, Bryon Wilson, John Abbott and Pete Paterson were guided through both the Algonquin Energy from Waste (EFW) Facility and Peel's new Integrated Waste Management Facility (IWMF) respectively by Algonquin Plant Manager David Willison and Peel staff member Leigh-Anne Marquis.

## REPORT OBJECTIVES

The principal objectives of this report are to as follows:

1. To provide an overview of solid waste tonnage disposition generated in Peel Region.
2. To provide an overview of the respective roles of the Region and the Province with respect to solid waste management.
3. To briefly review related initiatives in North America.
4. To determine any weaknesses in the present solid waste management system affecting Caledon.
5. To provide Council with a draft resolution outlining issues and the most desirable actions needed to strengthen current waste management practices in Peel.

## DISCUSSION

### **CURRENT WASTE DISPOSITION AND REGION OF PEEL AND PROVINCIAL ROLES**

#### 1. OVERALL RESIDENTIAL TONNAGES

Peel managed a total of 428,742 tonnes of Residential Waste in 2004, the most recent year for which all data is available. (See Table) Of this total, 234,837 tonnes or 54.8 percent were disposed of and 193,905 tonnes or 45.2 percent were diverted. This diversion figure does not include Energy from Waste tonnage of 110,560 in 2004 (or 25.8 percent) because the Province does not recognize incinerated tonnage as "diverted". While there appears to be no tangible advantages to having the Province (e.g. grants) recognize EFW tonnages as "diverted", Peel could have "bragging rights" to 71 percent residential diversion now instead of just 45 percent.

Peel staff noted that composting efforts will be expanded beyond Caledon to all of Peel Region in 2006.

Algonquin EFW Plant Manager David Willison stated that, with respect to the EFW facility stack emissions, the consultant ORTECH concluded : "That the facility is maintained within the operational parameters defined by the Certificate of Approval and amended C of A that constitutes normal operation during the stack test periods."

#### 2. VERY LITTLE PEEL INDUSTRIAL, COMMERCIAL, INSTITUTIONAL (ICI) WASTE IS COLLECTED BY PEEL REGION DIRECTLY FROM THE ICI SECTORS

A small tonnage of commercial waste is collected from Business Improvement Areas such as downtown Brampton. In addition, small businesses can drop off recyclable and non-recyclable materials at Community Recycling Centres. ICI waste is handled by the private sector, with the notable exception of product waste and packaging which has been acquired by residents. This product waste is handled by the public sector (Peel Region) in regular residential pick-ups or special large-item pick ups, at public cost.

#### 3. ONTARIO WASTE DIVERSION ACT (WDA) AND WASTE DIVERSION ONTARIO (WDO)

Waste Diversion Ontario (WDO) was created in 2002 under the 2002 Ontario Waste Diversion Act (WDA) as a non-crown corporation to develop and operate waste diversion programs for a wide range of materials. So far blue box waste, used oil material, used tires and waste electronic and electrical equipment have been designated under the WDA. Possible future materials include household special waste, organic materials, pharmaceuticals and fluorescent tubes. Once the Minister has designated a material through a regulation under the WDA, the Minister asks WDO to develop a diversion program.

MOE designated used tires in 2003 and asked WDO to develop a diversion program. WDO approved a Scrap Tire Diversion Program Plan Sept 15, 2004 and forwarded it to MOE which placed the Plan on the Environmental Registry for public comment. At MOE's request, WDO further developed a Waste Electronic and Electrical Equipment diversion plan and submitted it to MOE in July 2005. The question of adding environmental fees to newly designated items (such as that now applied to tires) is a further possibility, but no follow through action by the Province is yet evident.

#### 4. ICI AND THE PRIVATE SECTOR SEEKING MORE LANDFILL CAPACITY

Peel staff noted that the private sector is pursuing more landfill capacity in southwest Ontario and that there are currently 5 applications before the Minister of Environment for landfill expansion outside the GTA. While Caledon is not necessarily targeted for more landfill space at this moment, it is clear that considerable more landfill space, mostly for manufactured waste products, will be needed in Ontario over the next few years.

#### 5. WASTE HAULAGE COSTS GOING UP

On April 5, 2006, The Caledon Enterprise reported that Peel will be paying an additional cost for hauling its garbage to Michigan of between \$500,000 and \$600,000 due largely to increased fuel costs. The current haulage contract ends in July 2007, when a new contract will be required.

### **NORTH AMERICAN EXPERIENCES**

The May 2006 issues of "Alternates" (Helen Spiegelman) and the Canadian Geographic (Chris Turner) concludes, using US data, that waste per capita has doubled since 1960 and is currently still increasing at a rate of about 1.2 percent per year. Most importantly, these articles point to manufactured products as, by far, the main cause of this per capita increase.

Both articles noted that the best tool available to shift the focus more upon waste reduction is "Extended Producer Responsibility" (EPR) which requires companies that produce the products to take on the task of dealing with them when they become garbage. This is essentially the approach which Ontario has taken with its Waste Diversion Act but its progress so far in shifting the focus to product waste reduction is not having a noticeable effect.

Both articles remind us why EPR across Canada and the Waste Diversion Act was originally supported in Ontario in 2002. They note that EPR programs make manufacturers responsible for the entire lifecycle of their products (including take back, recycling and final disposal). Because they divert materials from the waste stream, every EPR program reduces the overall cost of the community waste system and the likelihood of future liability (e.g. landfills). These national articles also remind us of the potential energy savings from 3 R's efforts. With enforced legislation we are reminded that

producers will then be motivated to become serious about lifecycle analysis for their products. Quantifying the related embodied energy from different kinds of garbage can provide a meaningful basis for prioritizing recycling policy and programs. But most importantly, these lifecycle measurements provide cradle-to-grave energy profiles that can help product designers and manufacturers select which materials to use in the first place, as well as the associated packaging.

The above noted articles confirm that Ontario is basically on the right track. Why then has very little, if any, noticeable progress been evident in waste reduction, particularly with product waste?

## **WEAKNESSES OF PRESENT WASTE MANAGEMENT SYSTEM**

### **a) PEEL FACILITIES CLOSE TO CAPACITY**

Peel staff noted that, currently, residential collection for diversion is 104,000 tonnes per year. The capacity of the new IWMF facility is 130,000 tonnes per year. Peel staff estimate this capacity will be reached in five years with current population growth.

Peel staff also noted that current EFW waste being incinerated is about 160,000 tonnes per year as compared to 110,560 tonnes incinerated in 2004. Peel staff have no current plans for expansion of these facilities.

According to current future population allocations handed down by the Province as a result of its 2006 "Places to Grow" report, as many as 600,000 new residents might be expected to be added to Peel's population by 2031. CEAC also notes that all municipal decisions, such as Peel's, must be consistent with the Provincial Policy Statement, which states that "Waste Management Systems need to be provided that are of an appropriate size and type to accommodate present and future requirements, and facilitate, encourage and promote reduction, reuse and recycling objectives."

Algonquin Plant Manager David Willison stated that per capita waste generation is increasing in addition to the additional garbage being generated by steady population growth. That is, waste reduction achievements are decreasing per capita rather than increasing.

While Peel residents have been recycling a bit more each year, the amount of per capita and household garbage generated has stayed about the same, that is, we are not noticeably reducing our residential garbage generated.

Trevor Barton, Supervisor of Waste Program Planning at the Region of Peel states that:

*"Despite all our efforts across the Province, non-recyclable packaging is still gaining ground. There is a plethora of pseudo-recyclable "claims" in packaging designs. The problem is that we as the MRF operators cannot distinguish plastic resin types from week to week, the packaging remains the same but the resin type differs with each*

*manufacturer's production run. The Region of Peel is very supportive of Extended Producer Responsibility (EPR) and we argue the stewardship issues with the plastics manufacturers on an ongoing basis."*

This situation of growing population plus increased per capita waste generation places Peel and many other municipalities in an increasingly difficult position. This position cannot be improved by any one municipality. Provincial leadership is necessary to coordinate and enforce waste reduction.

#### b) NO DATA AVAILABLE OF ICI WASTE GENERATED IN PEEL OR IN PROVINCE

No jurisdiction tracks ICI waste data. No data on how much ICI waste is recycled is available. Peel staff state that the historical rule of thumb measure to estimate Peel ICI waste is one-third residential to two-thirds ICI meaning that the Peel ICI sector generates at least 860,000 tonnes and possibly more than 1,000,000 tonnes in addition to Peel residential waste.

The Ontario situation seems to be worsened by the lack of data in Ontario for ICI, particularly product waste, from the manufacturing and commercial sectors. With no reliable ICI waste data at all, we are lulled into a false sense of security by the commendable progress being made in residential waste recycling. Moreover, CEAC notes that, without reliable ICI data, it is difficult to measure progress in waste reduction programs.

It is evident that only a concerted provincial effort to reduce commercial and manufacturing waste would result in significant reductions of residential waste currently being handled by the public sector at significant public cost.

#### c) LITTLE PROGRESS ON PROVINCIAL 2004 DISCUSSION PAPER ISSUES

The Provincial (MOE) 2004 discussion Paper "Ontario's 60% Waste Diversion Goal" outlined numerous potential action items which could be part of a provincial waste diversion strategy such as:

- Review and consistently enforce diversion regulations for ICI sectors
- Designation of new wastes for which Waste Diversion Ontario must develop waste diversion programs.
- Require the largest waste generators to publicly report their waste diversion rates.

In response to inquiries made to MOE by CEAC about progress on developing these action items, the Minister of the Environment responded on January 17, 2006 that "Ministry staff are currently evaluating options and opportunities to move forward on a number of initiatives that support increased waste diversion." Peel Region has received no response to its recommendations.

## CONCLUSIONS

Peel Region is making commendable progress in diverting residential solid waste. However, it is not responsible for the waste being generated in Peel Region by the ICI sector with the notable exception of product waste and packaging which has been acquired by residents. While ICI waste is subject to the 1994 3 R's Regulations, little provincial enforcement of the 3 R's on the ICI sector has been exercised.

Lack of public data of any kind in Ontario for ICI waste impairs comprehensive approaches to waste reduction which is the primary goal of waste management before recycling and reuse. At the same time, the extensive publicity given to Ontario's and Peel's commendable leadership in residential waste recycling has an effect of lulling many into thinking that comprehensive waste reduction is well in hand in Ontario.

Peel Region staff estimates that ICI waste generated constitutes between two-thirds to one-half of total GTA waste generated.

The 2002 Ontario Waste Diversion Act has set out on a path of Extended Producer Responsibility (EPR) to involve the wide array of producer stakeholders in the technology and cost of reducing product waste. The two recent articles on North American waste management support the Ontario approach of EPR.

Peel Region, or any other municipality, cannot alone deal with product waste generators to reduce waste. Any such initiative must be led by the Province.

Lack of Provincial action in addressing undiverted Peel and other GTA ICI waste and delays in designating mandatory items for waste reduction can have several negative effects:

- it will prolong a costly export strategy for hauling waste to distant landfill operators,
- it will delay necessary resource recycling and reduction technology from emerging,
- it will delay manufacturing practices from embracing less wasteful, life cycle considerations for their products and associated packaging, and
- it will delay any significant reduction of the total waste stream.

## APPENDIX A: RESOLUTION TO THE MINISTER OF THE ENVIRONMENT

Whereas, The Region of Peel has achieved a 45% residential waste diversion rate and could claim a present 71% residential diversion rate if Energy From Waste (EFW) tonnages diverted from landfill were counted.

And Whereas, Peel targets a residential waste diversion rate (without EFW tonnages included) of 60% by 2008 and 70% by 2016

And Whereas, Peel anticipates an increase of approximately 600,000 new residents in the Region by 2031,

And Whereas, Peel believes that per capita generation of waste is increasing over and above increased residential waste from steady population growth within the Region,

And Whereas, Peel facilities for residential waste diversion are currently operating close to capacity,

And Whereas, Peel Region is not responsible for Industrial, Commercial and Institutional (ICI) waste, with the notable exception of product waste and packaging which has been acquired by residents.

And Whereas, Peel, by itself, cannot effectively increase the amount of diversion by the ICI sectors,

And Whereas, Peel has historically observed that municipalities in the Greater Toronto Area generate from twice to three times the amount of ICI waste than they do Residential waste,

And Whereas, Peel is aware that the Private and ICI sector is actively seeking expansion of at least five landfill sites for waste,

And Whereas, Peel is aware that very little progress has been evident in diverting materials from landfill since the Province's 2004 Discussion Paper "Ontario's 60% Waste Diversion Goal'.

And Whereas, it is likely that most other municipalities besides Peel in the Greater Toronto Area and the Province at large are experiencing the same considerable pressures to divert or reduce waste,

**Now Therefore, Peel, in cooperation with the Town of Caledon and its  
Environmental Advisory Committee, urges the Province to:**

- 1) increase its efforts to implement the action items addressed in the 2004 Discussion Paper designed to reduce the total amount of waste going to landfill, and**
- 2) increase its efforts under the Waste Diversion Act to enforce waste reductions in already designated items, and**
- 3) increase its efforts to designate additional items under the Waste Diversion Act and involve more producers in waste reduction innovation, and**
- 4) increase its efforts to work with product manufacturers to design product packaging which is amenable to recycling and to reduce it to the minimum required to protect the product from damage during transportation.**