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## ONTARIO CENTRE FOR MUNICIPAL BEST PRACTICES

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### Best Practice Summary Report SW – WD – 04 – 03

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### Solid Waste – Waste Diversion – Maximizing Types of Recyclable Materials Collected June 2004

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**Practice Identification:** Solid Waste Diversion – Maximizing Types Of Recyclable Materials Collected

**Case Study Municipality:** Regional Municipality of Peel

**Key Word:** Operations  
Customer Service

#### Benefits Derived from the Implementation of the Practice

- High diversion rates
- Low customer complaints
- Ease of use
- High participation

#### Description of Practice in the Case Study Municipality

Many municipalities average five to nine different types of materials in their programs. As a result of its Long Term Waste Resource Management Strategy, the Region of Peel committed to maximizing the types of recyclable items collected through the blue box program, as a means to achieve its goal of 70% diversion. By 1999, Peel had increased the number of recyclable materials it collected to sixteen. The Blue Box Program was expanded in stages:

- 1990 – Expanded blue box program to include mixed plastic that included PET, HDPE, tubs & lids, tetrapack and textiles (5 sort);
- April/May 1995 – Expanded blue box program to add Styrofoam, film, clamshells and boxboard;
- May 1999 – Removed textiles from the blue box program; and
- 2000 – Included empty aerosol and paint cans

- 2000 added a Grey Box for fibre collection.

Residents are provided with two recycling boxes and instructed to place all recyclable fibre materials in the Grey Box and recyclable containers in the Blue Box. Recyclable materials are collected at the curb weekly.

Peel was able to use its existing Materials Recycling Facility (MRF) to handle new materials, modified to meet Peel's additional material processing requirements. Regional staff feel that the addition of materials to their recycling collection program has been a significant factor regarding their increased diversion rate.

The Region of Peel has a population 1,054,000 and has single-tier responsibility for waste management. The waste collection service area is approximately 95% urban by population (Peel's rural land mass is larger in size than the urban area) and consists of approximately 75% single family and 25% multi-family dwellings. In 2002, the Region collected 398,332 tonnes of waste of which 45% was diverted.

The Region of Peel is a participating municipality in the Ontario Municipal CAO's Benchmarking Initiative. The Ontario Municipal CAO's Benchmarking Initiative is the result of a CAO's partnership effort to continuously strive for service excellence in municipal government. Participating municipalities are working together to identify and share performance statistics and operational best practices, and to network in a spirit of innovation and entrepreneurship to push for even greater successes.

## **Evaluation of the Practice**

### *Efficiency*

Based on the 2002 MPMP results, the Region of Peel has a lower than average operating cost per tonne for waste diversion programs among municipalities in the population class over 100,000. Implementation of this practice in Peel has contributed to increasing the tonnage of recyclable material diverted by approximately 90% between 1995 and 2002. Recycling collection and processing costs increased by 27% during that time, or only 12.5% after inflation (per-tonne costs therefore decreased during that period). Maximizing the number of materials collected provides the opportunity for municipalities to increase the use of collection and processing operations that already exist.

### *Effectiveness*

Maximizing the number of recyclable materials has accounted, in part, for Peel's high diversion rate of 45%. In 1995, prior to the addition of new materials to the recycling program, Peel's diversion rate was 25%. Following the expansion of the recycling program to accept additional materials, Peel's recyclables tonnage increased 90%.

Allowing more types of recyclable materials to the program makes recycling more convenient and easy for residents to use. As a result, there are fewer inquiries from residents regarding the recycling program. Evidence from similar municipal programs suggests that convenience and ease of use induces residents to divert a higher percentage of materials because they feel empowered to recycle and do more for the environment. Studies suggest that, since expanding the recycling program, participation rates have increased to approximately 90%, compared to historical levels of 75-80%.

### *Legislative Initiatives*

The Ontario Ministry of Environment has announced plans to achieve 60% waste diversion. Furthermore the creation of WDO will compensate municipalities for up to 45% of the cost to operate their diversion programs based on effective and efficient programs compared to other municipalities. Maximizing the types of materials collected in the recycling program will help municipalities attain these goals.

### **Replication of the Practice**

This practice is particularly applicable for municipalities where collection and processing capabilities already exist. Municipalities would need to evaluate their circumstances on a case-by-case basis to determine the merit of implementing this practice. Municipalities should take into consideration the increase in revenue that would be generated by additional materials through the WDO. This additional revenue could significantly offset additional implementation costs.

The majority of above-average-performance municipalities collected between eleven and sixteen different types of materials in their recycling program. Examples of better-performing municipalities collecting more than eleven materials in their recycling program include Brockville, Kenora, Orangeville, Loyalist, North Glengarry, Petawawa, Greater Napanee, Owen Sound, Peterborough, Northumberland, Waterloo and Niagara.

The Environment and Plastics Industry Council (EPIC) promotes adding "All Plastic Bottles" to the collection program as a way for municipalities to maximize public participation in recycling programs, to increase the amount of plastics recycled, and to minimize contamination. EPIC states that an "All Plastic Bottles" collection program is designed to make recycling plastic bottles easier for residents by allowing them to put all of their plastic bottles out for recycling. This information can be found on their website at <http://www.cpia.ca/allplasticbottles> .

Limiting factors that could potentially preclude municipalities from implementing this practice would be lack of materials-processing space and/or cost to retrofit

existing facilities to process new materials. Accessibility to markets for additional materials could also be a limiting factor for some municipalities.

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