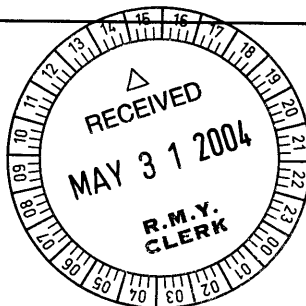


May 26, 2004

Mr. Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1



REGION OF YORK
CLERK'S OFFICE

FILE No. - *P27*

RE: **EXPANDED CURBSIDE RECYCLING PROGRAM (5.2)**

Dear Mr. Kelly:

This will confirm that at the meeting of Council held on May 25, 2004, Clause 8 of Report No. 28, was approved as follows:

"That the report entitled "Expanded Curbside Recycling Program" be received;

And that the Region of York be requested to provide an expanded co-mingled recycling program designed to increase recycling diversion rates to meet Waste Diversion Ontario's (WDO) new diversion targets and maximize future WDO funding;

And that the expanded co-mingled recycling program include all plastics #1 through #7, including plastic bags, aluminium trays, pie plates and foil, textiles, empty aerosol and paint cans, and polystyrene, to commence with the opening of the Region of York's Bales Road Material Recovery Facility (MRF) in 2005;

And that the Region of York be requested to include bag breaking and bag removal equipment in the Bales Road MRF design so that Markham and other area municipalities have the operational flexibility to use blue bags or blue boxes for 3-stream co-mingled recycling collection;

And that a copy of this report be forwarded to the Clerks of the Area Municipalities, Waste Diversion Ontario and the Association of Municipalities Ontario."

Yours sincerely,



Sheila Birrell
Town Clerk

Copy to: All Area Municipalities
Ms. Glenda Gies, Waste Diversion Ontario
Stan Bertoia, General Manager, Construction & Utilities
Claudia Marsales, Manager, Waste Management



REPORT TO COMMUNITY SERVICES AND ENVIRONMENT COMMITTEE

TO: Mayor and Members of Council

FROM: Stan Bertoia, P. Eng., General Manager Construction and Utilities

PREPARED BY: Claudia Marsales, Manager, Waste Management

DATE OF MEETING: May 10, 2004

SUBJECT: Expanded Curbside Recycling Program

RECOMMENDATION:

THAT the report entitled 'Expanded Curbside Recycling Program' be received;

AND THAT the Region of York be requested to provide an expanded co-mingled recycling program designed to increase recycling diversion rates to meet Waste Diversion Ontario's (WDO) new diversion targets and maximize future WDO funding;

AND THAT the expanded co-mingled recycling program include all plastics #1 through #7, including plastic bags, aluminium trays, pie plates and foil, textiles, empty aerosol and paint cans, and polystyrene, to commence with the opening of the Region of York's Bales Road Material Recovery Facility (MRF) in 2005;

AND THAT the Region of York be requested to include bag breaking and bag removal equipment in the Bales Road MRF design so that Markham and other area municipalities have the operational flexibility to use blue bags or blue boxes for 3-stream co-mingled recycling collection;

AND THAT a copy of this report be forwarded to the Clerks of the Area Municipalities.

PURPOSE:

The purpose of this report is to request the Region of York to expand the range of co-mingled recyclable materials accepted at the Bales Road MRF and to accept co-mingled recyclables either loose from blue boxes or in blue bags.

BACKGROUND

Waste Diversion Ontario (WDO) links funding to increased diversion

On December 22, 2003, the Minister of the Environment approved the WDO's Blue Box Program Plan that will reimburse municipalities up to 50% of their net recycling costs and announced Ontario's new target of 60% diversion of all blue box materials by 2008.

The WDO blue box funding model is being designed to reward municipalities that achieve high diversion rates *and* recycle a wide range of materials in their curbside recycling program. Many Ontario municipalities collect up to 15 different materials types in their recycling programs. The Region's new MRF provides an excellent opportunity to allow Markham to expand its curbside recycling program and maximizing the amount of WDO funding it will receive; and achieve the aggressive diversion targets established by the Province.

Blue bags provides program flexibility and increased capture of recyclable materials

As additional recyclables come on stream in the future, it may not be realistic to expect residents to increase their recycling capacity by increasing the number of blue boxes they use. One solution is to allow residents to supplement their blue boxes with blue bags. Allowing residents to use blue bags for recycling would decrease the number of blue boxes residents need to purchase and increase the amount of recyclable materials captured by providing residents with unlimited capacity to recycle.

Another advantage of a system that can handle blue bags is that it provides municipalities the flexibility to implement collection efficiencies, such as co-collection and bi-weekly collection.

Municipalities such as Halifax, Guelph, Edmonton, Northumberland County that have built new recycling facilities have incorporated bag breaking equipment and allow residents to use blue bags. Toronto has requested pricing for blue bag processing as part of their RFP process.

Markham's 'Bag-it' Pilot indicates residents prefer blue bag recycling

In March 2000, Markham launched a pilot project to study the social, operational, and financial aspects of bag based 3-stream collection systems. The 'Bag-It' pilot tested the collection of kitchen organics and recyclables in plastic bags. Residents were allowed to use blue bags in addition to blue boxes for their recyclables. The blue bags were provided to the pilot participants for free.

The pilot project data clearly indicated that residents preferred using plastic blue bags for their recyclable material. During the pilot 82% of the participating households used blue bags instead of blue boxes for recycling. The major reasons participants preferred the blue bag over the blue box were:

- Less litter from blue boxes and recycling trucks
- Convenience: bags were easy to store and light weight to carry to curb
- Unlimited recycling capacity
- One way trip to the curb and no blue box and materials left behind after collection
- Kept materials dry during wet weather

York Region eliminates 'bag breakers' from new MRF design

York Region is in the initial stage of building a new material recovery facility (MRF) on Bales Road in East Gwillimbury. The capital cost of the facility is approximately \$27-\$29 million (not including land acquisition). The initial MRF design allowed for the processing of fully co-mingled recyclables received loose from blue boxes or in blue bags. This provided the area municipalities more flexibility to implement 3-stream co-collection options. On September 12, 2002, York Region issued a 'Fact Sheet' on 3-stream collection stating:

“ Individual municipalities may vary their collection procedures somewhat using bags, carts, open containers or blue boxes”

The original facility design included two “bag breakers”. A bag breaker is an uncomplicated piece of machinery that rips open blue bags, which are then conveyed to a baler through an air vacuum system. The blue bags can then be recycled with the other plastic film (#4 plastics).

During negotiations by York Region, the bag breaking and removal system was eliminated from the facility design. Based on costs provided by the Region, eliminating the de-bagging equipment reduced operational costs by \$27.00 per tonne and reduced capital by approximately \$1 million. As outlined in regional staff report dated December 10, 2002, “Blue Bag MRF Processing Review”, the Region calculated that based on processing 60,000 tonnes per year a savings of \$1.65 million could be realized. On December 19, 2002, Regional Council passed the following resolution:

“ The Region design and operate the MRF at Bales Drive to accept loose, co-mingled recycled material” and, the local municipalities be advised that they are required to deliver only loose blue box material to the Region’s future Bales Drive recycling facilities and Southern transfer station.”

This resolution effectively eliminated the option to allow residents to use blue bags for curbside recycling. Subsequently, Regional staff indicated that the issue of blue bags could be revisited at a future date and the MRF facility design would retain space for the bag breaking equipment.

Taking an average of the processing costs outlined on Table #1, the average market price to process bagged co-mingled recyclables appears to be in the range of \$5.00- \$7.00 per tonne including capital. Based on the regional staff estimate of 60,000 tonnes per year, the cost to process bagged co-mingled recyclables is approximately \$300,000 - \$420,000 per year including capital. The cost to process Markham’s 18,000 tonnes of bagged recyclables would be \$90,000 - \$126,000 per year. Table #1 below outlines the cost of processing bagged recyclables at other comparable MRFs:

TABLE #1
Per Tonne Processing Costs

Municipality	Cost per tonne	Material Mix –Loose from Blue box or in Bags	Capital Equipment
York Region	\$27.00		Does not include capital
Toronto Tender #1	\$ 1.25 \$ 4.00	25% blue bags / 75% loose 100% blue bags	Includes capital
Toronto Tender #2	\$ 3.20	100% blue bags	Includes capital
Edmonton	\$ 8.03	100% blue bags	Includes capital / maintenance/ labour
Northumberland	\$ 6.19	100% blue bags	Includes capital

FINANCIAL CONSIDERATIONS:

Increasing the amount and types of materials collected at the curb will help Markham maximize the amount of WDO funding received and allowing the use of blue bags will provide the flexibility to implement cost effective collection strategies.

ENVIRONMENTAL CONSIDERATIONS:

Maximizing the convenience and efficiency of Markham's recycling program while increasing the amount of recycling materials diverted from landfill will ensure Markham achieves established diversion targets.

ACCESSIBILITY CONSIDERATIONS:

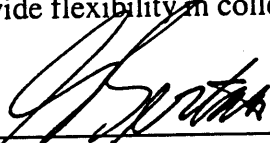
By requiring only one trip to the curb, blue bags will increase the convenience of recycling to residents with accessibility challenges.

ENGAGE 21ST CONSIDERATIONS:

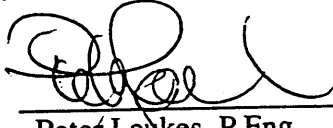
A progressive recycling program that promotes convenience and efficiency will help ensure Markham's position as a quality community with strong community awareness and involvement.

CONCLUSION:

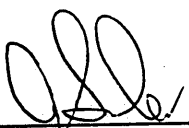
Allowing residents the choice of using blue bags and/or blue boxes and expanding the types of materials accepted for recycling provides the opportunity to increase Markham's diversion rate and maximize the amount of funding awarded from the WDO. A bag-based recycling system will provide flexibility in collection methods and frequency and reduce litter.



Stan Bertoia, P.Eng.
General Manager, Construction and
Utilities



Peter Loukes, P.Eng.
Director, Operations and Asset
Management



Jim Sales
Commissioner of Community and Fire
Services