



**TOWN OF AURORA
GENERAL COMMITTEE REPORT**

No. PW04-007

SUBJECT: *Waste Management Update*

FROM: W. H. Jackson, Director of Public Works

DATE: February 17, 2004

RECOMMENDATIONS

THAT Council receive General Committee Report No. PW04-007 dated February 17, 2004 from the Director of Public Works providing a waste management update as information;

THAT the collection of kitchen organic material be undertaken in conjunction with the collection of co-mingled blue box material with a proposed implementation date of July 1, 2005;

THAT staff be requested to report further on the specifics of implementation of kitchen organic material waste collection, co-mingled recycle material collection, a waste bag user pay program, and waste collection from Industrial, Commercial and Institutional sources as soon as practicable;

THAT staff discuss with Miller Waste Systems extending the existing waste and recyclable collection contract at the same terms, conditions and unit prices quoted in their May 18, 1999 tender submission until such time as collection of kitchen organic and co-mingled recyclable materials is implemented and report back to Council on the results of this discussion as soon as practicable;

THAT staff be requested to review the Town's current by-laws regarding waste and property cleanup/refuse dumping and report back to Council on any proposed or required amendments;

THAT plastic bags be eliminated from the collection of yard waste as of January 1, 2005;

THAT Council provide direction to staff with respect to the future management of the Town's waste and recycling collection programs; and

THAT the Regional Municipality of York Council be informed of these decisions.

BACKGROUND

Council is presently faced with the following significant waste management issues all of which will occur within a short time frame and, directly impact each other:

- York Region will be entering into an agreement with Halton Recycling Ltd. to operate a combination organic/yard waste processing facility in Newmarket commencing operation later this year, and subsequently has requested the area municipalities to:
 - a) Eliminate the collection of yard waste in plastic bags by January 1, 2005; and
 - b) Implement a source separated organics program no later than July 1, 2005.
- The Bales Drive Waste Recovery and Transfer Facility is expected to open in the first half of 2005;
- The matter of litter control is coming to the forefront; and
- The Town's current waste and recycling collection contract with Miller Waste Systems expires August 31, 2004.

COMMENTS

As noted above, there are a number of issues that Council needs to consider. Details on these matters are presented below.

1.0 Implementation of a Source Separated Organic and Co-mingled Recyclables Collection Program

Source separated organic collection (also known as kitchen organic collection) forms an integral part of the 3-stream waste collection system Council endorsed at its meeting of September 26, 2000.

1.1 Program Details

This is a Region wide organic diversion program where household organics (i.e. fruits, vegetables, coffee/tea grounds, etc.) are separated by residents (i.e. source separated) for collection independent from waste and recyclables (i.e. 3-stream), and subsequently processed into marketable composting products. This initiative would be similar to existing programs in Guelph and parts of Toronto.

Regional staff has proposed to offer assistance to area municipalities with the development of a co-ordinated system, promotion, and education program. York Region is requesting area municipalities to implement their organic collection program by July 1, 2005.

1.2 Organic Processing Facility

York Region will be entering a two-year (plus 3 one-year extensions at the discretion of the Region) contract with Halton Recycling Ltd. to receive and process organics and yard waste at their Newmarket facility starting April 1, 2004. This is considered a short term management approach as York Region has entered into a joint Request for Proposal (RFP) with Toronto and Durham Region to develop a longer term management of a larger organic and yard waste processing capacity. It is anticipated that the results of the RFP will be presented to Regional Council in March 2004.

Regional staff is also holding discussions with Durham Region and other private contractors to develop contingency plans to receive and/or process York Region's organic and yard waste should Halton's facility encounter operational problems.

1.3 Discussion

1.3.1 Diversion Rates

Although organic collection is considered a program enhancement, the new Provincial government is committed to mandating organic collection within the next five years. It is anticipated that the 2003 Region wide diversion rate of 24% would increase to over 41%, upon full implementation of the organic collection program.

1.3.2 Costs

Based on the Town's current contract costs and the Region's implementation dates, it is anticipated that collection costs would increase from approximately \$1.3 million annually in 2004 (no organic collection) to \$1.9 million in 2005 (organic collection starting July 2005) and \$2.2 million in 2006 (full implementation of organic collection). These costs have been identified in the Public Works 2004-2006 Operating Budget forecast. The costs cannot, of course, be verified until a new contract is tendered.

Additional capital costs of approximately \$400,000 would also be required if the Town were to supply all residents with a small kitchen bucket to collect organics and a larger curb side collection container, similar to that currently used in Toronto. These costs have not been identified in the Department's forecast, and York Region at this time has not committed to provide any funding towards the purchase of these containers. The decisions that are required before implementation of this collection system (all of which will impact costs) are:

Start date of implementation;

Frequency of collection;
Containers materials will be collected in; and
Necessity or applicability of a three-bag waste limit.

1.3.3 Bales Drive Waste Recovery and Transfer Facility

The Region's new Bales Drive (East Gwillimbury) waste recovery facility is not expected to be operational until early 2005. This facility is closer to Aurora than the present Markham transfer site where the Town's waste is taken. Additionally, this site will accept co-mingled recyclable materials.

2.0 Elimination of Yard Waste in Plastic Bags

2.1 Current

The Town provides 14 yard waste collections annually, and residents are allowed the use of either clear plastic bags or open containers (i.e. garbage cans and bushel baskets) to dispose of their yard waste. Most residents utilize the plastic bags, however, the use of kraft paper bags is becoming more popular.

2.2 York Region's Request To Eliminate Plastic Bags

Plastic contamination in finished compost represents a concern to contractors marketing a usable end product from the yard waste. In addition, the Region's facility operator (Halton Recycling Ltd.) has offered a reduction in processing costs in the order of \$200,000 annually if kraft paper bags are used. Inasmuch as the Region is responsible for the processing costs, no savings to the local municipalities are anticipated to be passed down.

York Region is requesting local municipalities to implement the elimination of plastic bags starting January 1, 2005.

2.3 Discussion

Elimination of plastic bags would require residents to utilize either kraft paper bags or open containers. Kraft paper bags are smaller than plastic bags, and therefore would result in additional cost and effort from the residents due to the increased number of bags. Regional staff is proposing to offer assistance to area municipalities with developing a co-ordinated promotion and education program to disseminate information on this issue.

York Region is currently the only Greater Toronto Area region that allows the use of plastic bags for yard waste.

3.0 Collection Contract

All of the above matters will impact the Town's collection arrangements and ultimately costs.

3.1 Existing Contract Term

The Town's current five year contract with Miller Waste Systems of Markham, Ontario expires on August 31, 2004. There is no allowance in the contract for an extension.

3.2 Existing Services Provided

The contract includes the collection and disposal of waste, blue box recyclables, yard waste, Christmas trees, and white goods from residential areas (including apartments and condominiums), industrial/commercial/institutional (ICI) addresses, and the Public Works Yard. Collection at other Town owned buildings including the Town Hall and recreational facilities is under a separate contract administered by Leisure Services.

The contract also provides unit prices for the collection of organics because this program was anticipated to commence in late 2002 based on best available information from York Region when the tender was issued in early 1998.

3.3 Existing Value

Estimated value of the contract based on Miller's current unit prices and the Town's service levels are approximately \$1.3 million annually, and are governed primarily by the number of residential and ICI units serviced. There is no provision in the contract for an increase in the unit costs over the life of the contract.

3.4 Discussion

As noted in Section 1.1, implementation of an organic collection program is proposed to occur by July 1, 2005 although acceptance of organics at the Halton Recycling Ltd. Newmarket site is expected to occur in April 2004. Additionally, the Bales Drive Facility (see Section 1.3.3), which will accept co-mingled recyclable material, is not expected to be operational until early 2005. Both of these changes will have a significant impact on the Town's collection procedures particularly with respect to collection frequency and type of trucks used.

If the existing contract is allowed to lapse, to continue with the existing collection arrangement from September 1, 2004 to July 1, 2005 and then switch over to the new organic and co-mingled recyclable collection would require staff to develop and tender a two-tiered contract.

Regional staff has suggested that any current contracts expiring prior to the

completion of the Bales Drive Waste Recovery Facility and implementation of the organic collection program be extended until 2005. The contract extensions would provide Regional and area municipal staff with sufficient time to discuss logistics, timing, and cost implications.

If the existing contract is not extended, and to ensure uninterrupted collection service, a tender call would be required by late April of this year, with the tender results and subsequent recommendations submitted to Council in late June for consideration. It is anticipated that any newly tendered unit prices will be higher than the current costs, as there has been no increase for the past five years under the terms of the present contract. Additionally, Council would need to make some significant decisions related especially to organic collection (see Section 1.3.2) within the next couple of weeks.

In exploratory discussions, a Miller representative has indicated interest in extending the present contract. However, comments have been reserved on maintaining current unit prices until an official request has been received from the Town.

4.0 By-laws

Recent anti-litter initiatives and upcoming implementation of organics collection will require modification to certain Town by-laws.

4.1 Waste

By-law Number 3261-91 of May 15, 1991 (including By-law Number 3643-95.E of June 28, 1995 amending schedules of the afore-mentioned by-law) sets the parameters for residential and ICI waste, recycling, yard waste, and white goods collection, and is included in the current contract. The collection of organics is not identified in the current by-law.

4.2 Cleanup of Property/Dumping of Refuse

By-law Number 3354-91 of December 18, 1991 authorizes the Town to enact various by-laws dealing with matters related to debris and refuse on both private and municipal property. Public Works staff uses this current by-law occasionally with respect to the collection contract when dealing with absentee homeowners.

4.3 Discussion

As part of any proposed contract extension or new tender call, organics will need to be identified in an updated waste by-law. Council may also choose to review waste container limits and sizes, ICI and apartment/condominium collection, waivers to enter private property, and user fees to better implement a more consistent and cost effective collection program.

With respect to the less used by-law pertaining to debris and refuse on both private

and municipal property, Council may choose to review this by-law to better provide increased enforcement for both collection and the Town's new anti-litter program.

5.0 Management of Collection Programs

5.1 Current

Public Works manages the Town's waste and recycling collection programs, with advertising and enforcement assisted by the Marketing/Communications Co-ordinator and By-law staff respectively.

As there is a desire to better manage the collection programs through one assigned employee (rather than the responsibilities currently spread over several employees), Public Works has included a contract Waste Management Co-ordinator in its proposed 2004 budget for Council's consideration. It is envisioned that this employee in addition to coordinating the current collection and upcoming organic collection programs, would also be utilized to assist with the Town's new anti-litter program.

5.2 Alternative

Although York Region assumed responsibility for all disposal and processing costs in 2003, collection responsibility has remained with the area municipalities. As directed by Council at its meeting of September 24, 2002, staff have participated in a number of governance meetings between York Region and the local municipalities regarding collection responsibilities. To date, there has been no resolution to this matter.

York Region is currently the only Greater Toronto Area region where collection and disposal/processing responsibilities are assigned to area municipalities and the Region respectively.

5.3 Discussion

Maintaining collection responsibilities would allow Aurora to control service delivery levels utilizing current and future staff as required, thereby exercising direct control over the Town's tax rate.

Movement of collection responsibilities to York Region would allow flexibility for more Town staff resources, however, it is unclear if there are financial benefits to be gained by the taxpayer under this scenario.

OPTIONS

Council may choose not to act at this time, refer this report back to staff for further information, or provide direction to staff regarding the various issues.

CONCLUSIONS

Implementation of Kitchen Organic Material and Co-Mingled Recyclable Material Collection

It is anticipated that there will be an increase in collection costs when we begin collecting kitchen organic material. On the other hand, we anticipate a decrease in collection costs when we start collecting co-mingled recyclable material.

Accordingly, coupled with the fact that the collection trucks we ultimately use will undoubtedly be different than those that are presently used, it would be prudent to delay the collection of organic material until the Region can accept the co-mingled recyclable material. This would, therefore, establish an implementation date in 2005 (July 1, 2005 as requested by the Region) for both organic and co-mingled recyclable collection.

Extension of Existing Contract

The main point of concern relates to the expiration of the existing collection contract on August 31, 2004. Under normal circumstances, a new tender would be issued well in advance of the expiry date. This would then allow whatever activities were required prior to the start of the new contract (purchase of trucks, notification of residents/businesses of the change, organize contacts etc.) to be completed.

Circumstances today however, do not lend themselves to a new contract because a different collection system is expected to be implement by mid 2005. In addition, at that time the Town's waste, recyclable and organic material will be delivered to different locations than at present. In this scenario, the contract would have to be structured to deal with two entirely different arrangements. The distances traveled now versus those traveled with the new collection system will vary. Additionally, the type (and possibly number) of trucks used will change with the new collection system. All of these variables will be reflected in the cost of collection.

Normally under the Town's Procurement Policies and Procedures staff would tender this contract shortly so as to be ready for August 31, 2004. However, it is the opinion of staff that extension of the existing contract should be pursued as the first alternative (as noted earlier, preliminary discussions have been held with the Town's collection contractor on this matter). A longer-term contract would then be tendered in 2005 upon confirmation of implementation and facility operation dates to deal solely with the ultimate 3-stream collection system. This is a "cleaner" alternative that will allow the capital costs of the collection trucks to be recovered by the contractor over a reasonable period of time and will ensure that the ultimate collection arrangement has been finalized with the Region as appropriate. The alternative also allows Council sufficient time to deal with the various detailed decisions that need to be made as noted in this report.

Update of the Towns' Current By-laws Regarding Waste and Property Cleanup/Refuse

Dumping

It is apparent that the existing by-laws dealing with waste and recycling as well as debris and refuse on private property need to be updated. All of these matters should also be coordinated with any anti-litter programs the Town may engage in as well as the elimination of plastic bags within the yard waste stream.

In consideration of the above, it would be prudent to begin the review and modernization of the appropriate by-laws now in anticipation of the onset of the 3-stream collection system.

Management of the Town's Waste and Recycling Collection Program

Town Council at its meeting of September 24, 2002 requested:

“...staff to report further to Council after appropriate consultations have been held with the Region on the matter of the Region assuming responsibility for all collection activities in the Town of Aurora including the cost thereof”

As noted in this report, discussions with the Region and all local municipalities have been undertaken in this matter with no resolution to date. Staff believes this is an appropriate time for Council to revisit this matter and provide direction to staff.

In essence, there are two choices. Council can inform the Region that they wish to retain responsibility for the collection of waste, recyclable, yard waste and kitchen organics. In this way, the Town can determine the service levels however, the cost will appear on the Town portion of the property tax bill.

The second alternative is to request the Region to assume all collection duties. In this regard, the Region will be in a position to dictate the levels of service. The costs can be applied either directly to the Regional portion of the property tax (assuming all other local municipalities request the Region to assume their collection) or the Region can invoice the Town. In the latter case, the cost will still appear on the Town portion of the property tax bill.

FINANCIAL IMPLICATIONS

There has been no recent tender awards in York Region, given that contracts in Vaughan, Newmarket, Whitchurch-Stouffville, East Gwillimbury, and King Township also expire in 2004, Markham in 2005, Georgina in 2007, and Richmond Hill in 2009. It is difficult, therefore, to accurately determine at this time what additional expected costs Aurora will face, although efforts in this regard have been made in the 2004-2006 Outlook work. It is anticipated that collection costs will increase, because the current contract prices have remained the same for the past five years.

Based on the Town's current collection contract costs and 2004 proposed budget, it is

estimated that with the proposed implementation of organic collection in July 2005, an additional \$600,000 in 2005 and \$300,000 in 2006 will need to be budgeted for collection. These estimated costs are exclusive of any additional costs as a result of a contract extension or new tender, as directed by Council. It should be noted the above identified costs also include additional residential units to be serviced as a result of growth.

In addition to the above, an estimated start-up cost of \$400,000 in capital cost in 2005 (and an estimated \$10,000 annually afterwards for growth) for organic containers to be distributed to the residents will also be incurred. Council will need to make a decision on this matter in the near future and accordingly, this cost has not been included in the Outlook estimates.

LINK TO STRATEGIC PLAN

Goal A – To Maintain A Well Managed and Fiscally Responsible Municipality

ATTACHMENTS

York Region Report No. 2 of the Regional Solid Waste Management Committee Meeting of January 14, 2004, adopted by York Region Council on January 22, 2004

PRE-SUBMISSION REVIEW

Management Team Meeting - February 11, 2004

Prepared by: Ken Lauppe, Manager of Operations Services, ext. 3442

W. H. Jackson
Director of Public Works

**TOWN OF EAST GWILLIMBURY
COMMITTEE OF THE WHOLE (PLANNING) MINUTES**

MONDAY, 17 May 2004

A meeting of the Town of East Gwillimbury Committee of the Whole (Planning) was held on **Monday, May 17, 2004**, at 1:00 p.m. in the Civic Centre Council Chambers, 19000 Leslie Street, Sharon, Ontario

PRESENT: Mayor

James R. Young

Councillors

Marlene Johnston
Cathy Morton
Virginia Hackson
Jack Hauseman

STAFF:

Chief Administrative Officer
Director of Corporate Services/Municipal Clerk
Director of Finance/Treasurer
Director of Parks and Recreation
Town Engineer
Chief Building Official
Fire Chief
Senior Planner
Senior Planner
Deputy Clerk
Executive Assistant to Mayor and
Members of Council

John S. Rogers
Lucille King
Rebecca Mathewson
Rick Leclair
Wayne Hunt
Tim Gibson
Ken Beckett
Carolyn Kellington
Mark Stone
Anna Knowles
Debora McDermott

ABSENT WITH NOTICE:

LATE WITH NOTICE:

OTHERS:

Eva Ligeti, Co-moderator, Greater Toronto Area Clean Air Council (GTA-CAC)
Stephanie Lane, Project Manager, Greater Toronto Area Clean Air Council (GTA-CAC)
Darlene McMillan of Holland Landing
Al Duffy, Queensville Properties Development
Two (2) members of the public were present.

DECLARATION OF INTEREST

Councillor Virginia Hackson declared an interest with respect to item E. 16, Planning Report P2004-40, as she lives in close proximity to the area under consideration. She did not participate in the discussion or vote on the issue.

C. LEGISLATION AND BY-LAWS: Jack Hauseman, Chairperson

There were no reports.

D. PUBLIC WORKS: Virginia Hackson, Chairperson

6. Engineering Report ENG2004-08, dated May 17, 2004, re Household Source Separated Organic Waste Collection Program - 2005

Wayne Hunt, Town Engineer, provided an overview of the report and advised that municipalities within York Region are gearing up for a three-stream waste collection system, which may commence when the new York Region Material Recycling and Waste Transfer Facility on Bales Road opens in July 2005. In anticipation that the Michigan border may close to Canadian waste, the Provincial government announced recently that they will be developing a provincial policy to divert more waste from landfill to achieve a 60% diversion rate by 2008.

The Town of East Gwillimbury will be addressing some issues with the upcoming waste collection contract, which will be expiring in January 2005. This report outlines some of the areas requiring Council direction.

Councillor Morton added that the new three-stream waste collection system will affect the Town's rental of halls. Will containers have to be provided for all of the garbage, or will it be placed into the dumpsters, and if so, what happens when the dumpsters arrive at the dump site? Would they be rejected? Rick Leclair, Director of Parks and Recreation, agreed that this is an issue if there is strict requirement to comply with the new approach.

The Town Engineer advised that this is a specific program for residential initially. They will pursue this issue with the Region at their meetings and will get back to Council.

Councillor Hauseman voiced a concern that a three-stream waste collection system may not be readily accepted by the general population. Promotion and public education will have to be very important. The Region of York, the GTA and the Province will have to find a permanent new disposal site or new technology to get rid of the waste produced in the GTA.

There was discussion with respect to setting the bag limit. The decision will have to be made prior to the commencement of the S.S.O. collection program, prior to waste contract negotiations. The decision will have to involve budget decisions, renegotiation of the waste collection contract, as well as the Region's advertising and education program. It was felt that residents should be given lead time to prepare for the change.

Moved by: Councillor Johnston

BE IT RESOLVED THAT Engineering Report ENG2004-08, dated May 17, 2004, with respect to Household Source Separated Organic (S.S.O.) Waste Collection Program - 2005, be received;

THAT Council approve the collection of source separated organics (S.S.O.) commencing in 2005 after the Bales Road Material Recycling Facility and Transfer Station opens;

THAT the Region of York implement and fund a communication and education program to accommodate the commencement of the S.S.O. collection program and any additional recyclables that may be added to the blue box program upon the opening of the Bales Road Facility in 2005;

THAT the Region of York subsidize the purchase of reusable organic containers for each household;

THAT the Town's Refuse Collection and Disposal By-law No. 99-21 be amended to reflect waste management issues referenced in Engineering Report ENG2004-08;

AND THAT a decision be made with regard to the waste bag limits prior to the commencement of the S.S.O. collection program;

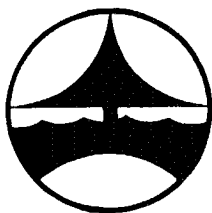
AND FURTHER THAT a copy of Engineering Report ENG2004-08 and the recommendations of the Committee of the Whole Council be forwarded to the Region.

Carried. CWC[P] 2004-69ENG

7. Engineering Report ENG2004-09, dated May 17, 2004, re Engineering Fees for Review and Approval of Municipal Consents for Utility Installations

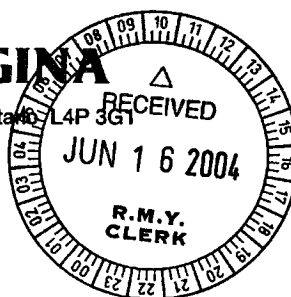
The Town Engineer advised that the Town will need to advertise publicly before the by-law can be changed. They will come back with the appropriate report to amend the by-law depending upon the public process.

Moved by: Councillor Johnston



TOWN OF GEORGINA

26557 Civic Centre Rd., R.R. #2, Keswick, Ontario



REGION OF YORK
CLERK'S OFFICE

FILE No. - **P27**

June 11, 2004

Regional Municipality of York,
Office of the Regional Clerk,
17250 Yonge Street,
NEWMARKET, Ontario
L3Y 6Z1

Attn: Denis Kelly, Regional Clerk

Dear Mr. Kelly:

Town Council at a meeting held on June 7, 2004, considered Staff Report No. EPW-2004-0023 entitled 'Three Stream Waste Management System'. Town Council passed the following motion, to implement such a system beginning September 1, 2007;

1. THAT REPORT NO. EPW-2004-0023 BE RECEIVED FOR INFORMATION.
2. THAT RESOLUTION NO. C-2000-0462 BE RESCINDED AND THE TOWN OF GEORGINA IMPLEMENT A THREE STREAM WASTE COLLECTION SYSTEM BEGINNING SEPTEMBER 1, 2007.
3. THAT AN AMOUNT OF \$125,000 BE RESERVED IN 2005, 2006 AND 2007 TO FUND THE PURCHASE AND DELIVERY OF SOURCE SEPARATED ORGANIC CONTAINERS.
4. THAT THE REPORT AND RESOLUTION BE FORWARDED TO THE GEORGINA ENVIRONMENTAL ADVISORY COMMITTEE FOR REVIEW AND ANY COMMENTS.
5. *THAT THE REGION OF YORK BE REQUESTED TO SUBSIDIZE THE COST OF THE CONTAINERS REQUIRED FOR THE THREE STREAM COLLECTION SYSTEM.*

Accordingly, we request that the Region of York consider subsidizing the cost of the containers required for the three stream collection system.

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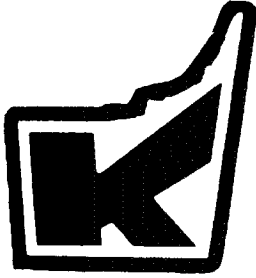
If you have any questions, please feel free to contact Mr. Bob Magloughlen, Town Engineer, directly at extension 234.

Sincerely,
FOR THE TOWN OF GEORGINA,

A handwritten signature in cursive script that reads "Carolyn Lance".

Carolyn Lance
Administrative Assistant to the Town Clerk

cc: Bob Magloughlen, Town Engineer



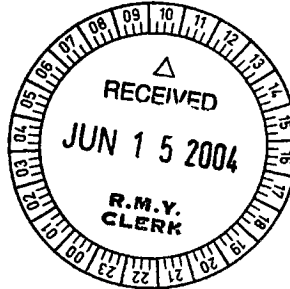
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June 11, 2004

Denis Kelly, Regional Clerk
Region of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1



REGION OF YORK
CLERK'S OFFICE

FILE No. - 127

Dear Mr. Kelly:

RE: Waste Management Strategy for Implementing Three Stream Collection System

At the Committee of the Whole Meeting of May 17, 2004 Committee considered and approved the enclosed Operations Department Report OP04-20 which summarized recent developments related to waste management policy and programs being implemented by the Province of Ontario and the Region of York.

Council at its' meeting of June 7, 2004 endorsed the Committee of the Whole recommendation, as follows:

- a) That Council endorse the Region of York initiative to achieve 60% diversion of municipal solid waste by implementing a three (3) stream waste collection system including collection of source separated organic (SSO) material; an expanded recycling program; and residual garbage disposal;
- b) That Staff proceed to identify the most cost effective program to implement the 3-stream collection system and report back to Council as soon as possible; and
- c) That Council supports the Region of York program for disposal of yard waste by requiring that King Township residents place all yard waste in paper bags or in open topped containers for collection, beginning in spring 2005.

An extract of the related Committee of the Whole Report is enclosed for your reference.

Yours truly,

A handwritten signature in cursive script that reads "Chris Somerville".

Chris Somerville
Clerk
Encl.

cc. Andrew Campbell, P. Eng., Director of Solid Waste, Region of York
 Kees Schipper, P. Eng., Commissioner of Transportation and Works, Region of York
 Rob Flindall, Director of Operations, Township of King

TOWNSHIP OF KING

COMMITTEE OF THE WHOLE REPORT

The following item from the Committee of the Whole Report of May 17th, 2004 was adopted by Council at its meeting of June 7th, 2004.

COPIES TO: FILE

ROB FLINDALL

C.O.W. #2004-153

OPERATIONS DEPARTMENT REPORT NO. OP04-20
RE: WASTE MANAGEMENT STRATEGY FOR IMPLEMENTING THREE (3)
STREAM COLLECTION SYSTEM

Committee considered Operations Department Report No. OP04-20 summarizing recent developments related to Waste Management Policy and Programs being implemented by the Province of Ontario and the Region of York and this report also identifies key areas where decisions of Council are required with respect to the Township's Waste Management System.

- a) That Council endorse the Region of York initiative to achieve 60% diversion of municipal solid waste by implementing a three (3) stream waste collection system including collection of source separated organic (SSO) material; an expanded recycling program; and residual garbage disposal;
- b) That Staff proceed to identify the most cost effective program to implement the 3-stream collection system and report back to Council as soon as possible; and
- c) That Council support the Region of York program for disposal of yard waste by requiring that King Township residents place all yard waste in paper bags or in open topped containers for collection, beginning in spring 2005.

CHRIS SOMERVILLE
CLERK

TOWNSHIP OF KING

DATE: May 17, 2004
TO: Committee of the Whole
FROM: Operation Department
SUBJECT: Waste Management Strategy for Implementing Three (3) Stream
Collection System
Report No. OP 04-20
REFERENCE: Operations Report PW02-24

1. RECOMMENDATION

The Operations Department respectfully submits the following recommendations:

- a) That Council endorse the Region of York initiative to achieve 60% diversion of municipal solid waste by implementing a three (3) stream waste collection system including collection of source separated organic (SSO) material; an expanded recycling program; and residual garbage disposal.
- b) That Staff proceed to identify the most cost effective program to implement the 3-stream collection system and report back to Council as soon as possible.
- c) That Council support the Region of York program for disposal of yard waste by requiring that King Township residents place all yard waste in paper bags or in open topped containers for collection, beginning in spring 2005.

2. PURPOSE

This report summarizes recent developments related to waste management policy and programs being implemented by the Province of Ontario and the Region of York. The report identifies key areas where decisions of Council are required with respect to the Township's waste management system.

3. BACKGROUND

On April 12th, 2001, Region of York Council adopted the recommendations of a Staff report approving a three-stream waste management system as a step to achieving 50% waste diversion from landfill. The Province of Ontario has recently announced that it is developing policies aimed at achieving 60% diversion of waste from disposal by 2008. These new policies are

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Report No. OP04-20

May 17, 2004

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motivated by the very real possibility that the Michigan border will be closed to Canadian waste imports within the next five years.

Within the next eighteen months, the Region will begin implementing a program to receive source separated organics (SSO) from the local municipalities and compost the SSO in a centralized facility. The Region will also be providing an expanded recycling program that will allow more materials to be included in the blue box collection program. The Region is constructing two new transfer stations and material recovery facilities (MRFs) to receive and transfer organics, recyclables and waste. The new MRFs will also allow municipalities to collect co-mingled blue box materials as a single stream. In other words, the waste collector will not be required to sort the material at the curbside into a compartmentalized truck. All of the materials will be sorted at the MRF through mechanical and manual means. These programs are expected to permit the Region to achieve its goal of 50% - 60% diversion from landfill.

The Regional Municipality of York has requested that the nine local municipalities finalize and report back to Regional Council by May, 2004 on the design and proposed implementation date of their collection systems for source separated organics with implementation occurring no later than July 1st, 2005.

Three stream collection systems are currently being implemented in many municipalities of Ontario including the City of Toronto, Region of Durham, Region of Peel, Simcoe County, Grey County and elsewhere. In York Region the Town of Markham is scheduled to begin phasing in a three-stream collection program starting in September 2004.

The Operations Department has retained R.J. Burnside Associates Ltd. to assist staff with the analysis of various waste collection systems. The consultant recently assisted the Township of Southgate in Grey County successfully implementing a three stream waste collection system.

The Region has also requested that local municipalities change the collection method for yard waste starting in the spring 2005. The Region will not accept yard waste at their disposal facilities in plastic garbage bags. Residents will be required to place all yard waste in kraft paper (brown paper) bags, or loose in open topped containers. This change is necessary to ensure that yard waste can be composted effectively.

4. ANALYSIS – WASTE COLLECTION AND DISPOSAL

To achieve the Province and Region's goal of reducing waste sent to landfill by 60% by year 2008 alternative disposal and recycling programs must be provided. At present the Township of King achieves a waste diversion rate of 19.6% excluding yard waste. If yard waste is included in the totals, the diversion rate is 25.3%. These totals are lower than the rest of York Region where the average diversion rate excluding yard waste is approximately 23%.

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May 17, 2004

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The Province has undertaken a number of studies to determine the typical composition of municipal solid waste. The following table is based on the Waste Diversion Ontario (WDO) audits of waste composition in Ontario.

Table 1 – Typical Waste Composition for King Township

	Recyclable Material ¹	Organics	Residual, Non-Recyclable Waste	Household Hazardous Waste	Total
Urban	35.6%	44.7%	19.3%	0.4%	100%
Rural	31.2%	36.2%	32.5%	0.1%	100%
Combined Average	32.8%	39.3%	27.6%	0.2%	100%

Notes: 1. Recyclable Material includes: Paper, plastics, metals, glass
 2. Based on approximate urban/rural split for King Township
 Source – WDO Waste Audits

To achieve 60% diversion of waste from landfill it will be necessary to capture a large portion of the organic material (39.3%) and as much of the recyclable material (32.8%) as possible. To achieve a high participation rate and a high capture rate for materials it is necessary to make the collection system as simple and easy to use as possible. Two approaches are recommended for further study.

1. The first system would consist of supplying three colour coded 240-litre (63 gallon) wheeled carts to each residence and business. A small plastic container (kitchen catcher) would also be supplied. The blue cart for recycling, the green cart for organics, and a grey cart for residual waste. With this type of system the collection trucks could be fitted with an automated arm that picks up the carts robotically. The larger bins would allow for a rotating collection system that would see organic material picked up weekly and recycling material and residual dry waste picked up on alternating weeks. This system has been successfully implemented in Southgate Township.
2. The second system would consist of supplying each residence and business with a 49-litre (13 gallon) pail. A small plastic container (kitchen catcher) would also be supplied. Recycled materials would be collected using the existing blue box system. Residual dry waste could be collected in bags or pails as currently exists. With this system the collection vehicles would be loaded manually. This system has been implemented in the City of Toronto, Peel Region and Durham Region. It is also the system that will be implemented in Markham starting this year.

To increase participation in the revised program the municipality in conjunction with the Region

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 May 17, 2004
 Page 4 of 4

must undertake an extensive education program. Consideration may be given to implementing a reduced bag or container limit for residual dry waste collection.

5. **FINANCIAL IMPLICATIONS – 3-STREAM WASTE COLLECTION**

Implementation of the revised 3-stream collection system will have considerable financial implications for the Township depending on the type of system chosen.

The cost for wheeled 240-litre carts is approximately \$60.00-\$65.00 including delivery. The per house hold cost to supply three bins would be approximately \$195.00. Assuming approximately 7100 residential and commercial collection points the cost to supply three large carts would be approximately \$1,382,550.00. Specially developed odour reducing carts can also be purchased for approximately \$65.00-70.00. This overall price could be lower if bulk purchases are made through a Tendering process. Further savings could be possible if carts are purchased through a Region wide program.

The cost for wheeled 49-litre containers will be approximately \$25 including delivery and the supply of the smaller kitchen catcher. Assuming approximately 7100 residential and commercial collection points the cost to supply one smaller cart would be approximately \$177,550.00.

The overall cost of the system including collection costs must be evaluated to determine the most cost effective approach. Consideration should also be given to selecting the system that will provide the greatest participation rate by residents with aim to achieving 70% diversion of waste from landfill. Staff will be working with the consultant to complete this evaluation before the end of June 2004.

The Region of York has committed \$150,000 in their 2004 budget to provide public education about the need to divert waste from disposal, particularly with respect to the problems the Region may be faced with shipping waste to the State of Michigan.

The local municipalities will be responsible to educate the public about the specific waste collection and recycling programs offered by the municipality and the Region. An appropriate cost for education of this nature is \$2.00 per household. This education program would therefore cost the Township approximately \$14,200.00.

FINANCIAL IMPLICATIONS - YARD WASTE COLLECTION IN PAPER BAGS

There are no financial implications for the Township for implementing collection of yard waste in kraft paper bags. Individual residents will be affected by the increased cost to purchase such bags as opposed to the current clear plastic bags.

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Page 5 of 5

The Region of York has contracted the processing and disposal of yard waste to Halton Recycling Limited (HRL). In the Region's contract with HRL a 10% cost reduction is applicable if residents use kraft bags instead of plastic. This reduction in cost represents a savings of over \$200,000/year to the Region of York and ultimately the taxpayers of York Region.

6. CONCLUSION

To achieve the provincial targets for waste diversion by 2008 it will be necessary to implement a 3-stream waste collection program targeted at diverting source separated organic material to centralized composting facilities and expanding the collection processing of recyclable dry materials. Implementing these programs will have cost implications to the Township that will have to be carefully analyzed and managed. The costs of the programs must be weighed against the obstacles to waste disposal in Michigan and the unknown future costs of finding alternative waste disposal sites.

It is recommended that the Township endorse the 3-stream collection and disposal system that will be offered by the Region of York. Further it is recommended that staff proceed to evaluate the two collection systems described in this report. Staff will also analysis the costs and benefits of a municipally owned and operated collection system compared to a privately contracted system.

Finally it is recommended that the Township require all yard waste to be collected in kraft paper bags or open topped containers to comply with the Region of York's request.

ATTACHMENTS

1. R.J. Burnside Report, May 10, 2004 – Solid Waste Collection System in the Township of King – Step 1
2. Region of York, Report to the Solid Waste Management Committee April 14, 2004 – Public Communication Strategy (Waste Management System)

Submitted by:



Robert Flindall, P. Eng.
Director of Operations

Reviewed by:



Bob Casselman
CAO

May 10, 2004

Township of King
King Centre Plaza
2075 King Road
King City, Ontario
L7B 1A1

Attention: Mr. Robert Flindall

Re: Strategic Planning for a
Solid Waste Collection System in the
Township of King
Step 1 - Compilation of Information
File No. LO 04 6432

Dear Mr. Flindall,

Burnside with the assistance of the Township of King and the Region has gathered documents regarding your solid waste systems.

The supplied information was compiled, reviewed and analyzed. The following background information will be used in the analysis and evaluation of collection systems (Step 2) and should be reviewed and confirmed by the Township. This letter provides a summary of data collected to date to meet the requirements set out in Step 1 of the *Strategic Planning for a New Solid Waste Collection System in the Township of King*, March, 2004. Obviously from our notes below, it is critical that we obtain the response from the Region, expected early this week, concerning our information requests on behalf of the Township.

Regional Management of SSO

We understand that Halton Recycling will manage the processing facility for organic waste under contract to the Region. Their full service contract starts September 2004. Halton Recycling is located at the 01395 Henry Walker Parkway South, Canada Composting Inc. in Newmarket. Yard waste was accepted at this site starting April 1, 2004.

Miller Waste will also take SSO and residual garbage at its Markham facility until July 2005. The type of organic material that will be accepted was provided in the email from Andrew Campbell to Rob Flindall, March 3, 2004, with the attached

Mr. Robert Flindall
May 10, 2004

Schedule 1 list. In our recent letter to the Region we have asked for confirmation that this is the list to use for organics that will be received by the Region.

Regional Recycling Facilities

A new transfer site/MRF will be developed at Bales Drive. Miller Waste will operate this site. Miller Waste has Regional approval for a design and build, and have a 5 year contract with the Region. This site is not scheduled to open until July 1, 2005. There will also continue to be a MRF at Markham and King's waste could go to either site. The types of recycling accepted will be single stream (commingled) blue box system. A complete listing of recycled materials that will be accepted is needed for our analysis. Although we have some indication of recycled materials to be collected, it is important that the Region confirm what they will collect. Again we have asked the Region on behalf of the Township to confirm all existing and new MRF facility opening, and ongoing operating dates planned.

Waste Residue for Disposal

We have asked the Region to provide confirmation as to which sites will receive waste for transfer and disposal, and the timing for each site. We understand that waste for disposal will be received at both the planned Bales Drive site and at Miller's Markham site. We also understand that HRL, Bales, and Markham all will receive SSO. Bales and Markham are to receive waste, blue box, and SSO. HRL to receive yard waste and SSO only.

Household Hazardous Materials

Burnside is aware of the location and schedule for household hazardous waste facilities.

Contingency Planning

Again we have asked the Region to confirm on contingency plans facilities/services to local municipalities, if planned facilities or services of the Region referenced above (or below) do not open or occur as currently scheduled.

Contaminants in the Recycling or Organics

Burnside asked about levels of contamination that might be acceptable in recycling and organics. Typically 2 to 5 percent levels at sites usually allowed by MOE. Burnside asked what happens if a load is unacceptable due to contamination? The Region replied that if levels are unacceptable, then the Region plans to reject that load from the site, and if it continues, they will refuse to accept local municipal offenders. This will have implications for the Township and monitoring and enforcement programs will be necessary for either a Township owned system or privately contracted collection system.

Schedule of Events

Although several dates noted above were discussed, Burnside has requested that the Region confirm a number of schedules (and advise if events or facility opening dates are not firm) for its provision of facilities and services. This will obviously be information critical to the calling of tenders, contractual, or purchase arrangements by the local municipalities for their planning of collection/transfer facilities, services, and equipment.

Waste Diversion Ontario Data Calls

We understand that the Region will provide WDO waste weight information for purposes of performance monitoring by local municipalities. However, it is expected that the Region will be collecting any WDO funding, not the local municipalities.

Mapping of Facilities and Preferred Routes and Facility Use

Although some information was supplied at our meeting, we have requested a map to scale from the Region, with all site locations marked, and any Regional preferences for haul route access in the immediate vicinity of each site marked. Also, we have asked that the Region indicate any preferences for use of one facility over the other for King's waste, based on their planning for facility use. This data is important not only to indicate possible route preferences of the Region, but for use in our cost analysis.

Public Communications Program

It is our understanding that the Region is planning to undertake an active public communications plan, to encourage waste diversion (recyclables, organics, and HHW), and we understand that assistance will be available to local municipalities.

The Region's report, dated April 14, 2004, to the Solid Waste Committee, was supplied to Burnside for information. It will be important to the Township's program development that Regional Council approves the public communications plan.

Details on Existing Solid Waste Collection Services

Burnside has received detailed confidential information from the Township regarding the current cost and scope of solid waste collection services. Burnside has reviewed this data and will take it into consideration when evaluating contracted collection services.

Population and Household Growth Estimates

The annual population growth rate estimates an annual growth rate of 2.2% along with an average population per household of 3.06 (see table 1). The population growth estimates and number of households was extrapolated over a ten-year period (see Table 2 and Figure 1).

Waste Classification and Generation Estimates

Burnside has summarized the 2003 waste disposal data for King Township within Table 3. Based on current diversion efforts the recycling diversion rate is 19.6%. According to waste audits conducted using the Waste Diversion Organization (WDO) method it is assumed that the overall maximum diversion could be 72.3% (see table 5). This estimate assumes that there is 100% diversion of available recycling, organics and household special waste materials.

Using the WDO percentage breakdown of waste prior to disposal and the total King Township disposal weight in 2003 Burnside was able to estimate the breakdown of waste prior to disposal. This data was then combined with the population growth estimate to develop a detailed ten-year outlook (see Table 5).

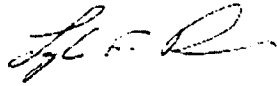
The waste generation and population estimates allow the Township of King to see the dramatic result of implementing an organic collection program as well as an overall waste diversion education plan. The estimated 72.3% maximum diversion of waste will generate additional revenue from WDO to the Region.

However, good collection system choices will be a major factor if high diversion rates are to be achieved. The Township of King would need to implement the three-stream collection system accompanied by an effective educational and monitoring program.

Step 2 will focus on 3 practical three stream solid waste collection alternatives and some possible combinations as outlined in my May 6, 2004 letter *Strategic Planning for a Solid Waste Collection System in the Township of King - Step 1 - Briefing to Council*. Burnside will provide the analysis and evaluation of those alternatives and recommend a preferred system alternative or alternatives for consideration and final decision by Council.

Yours truly,

R. J. Burnside & Associates Limited



Lyle F. Parsons, B.E.S
Vice President, Burnside Environment

Attachments

cc: Mr. Sean Quinlan, Burnside - Guelph Office

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Table 1
Population and Household Growth Calculations

Breakdown of Occupied Households

	Singles	Semis	Rows	Apartments	Total
Estimated Number of Occupied Households December 31, 2003	5,937	29	59	270	6,295
Percent of Total	94%	0.46%	0.94%	4%	100%

Urban versus Rural

	Percentage of Total
Urban	37%
Rural	63%

Note: The percent urban vs. rural estimates are based on the assumption that parcels of land that have water supply would be considered urban (2505) of the remaining 6810 parcels.

Population and Growth Estimate

Population	January-01	18,533	Statistics Canada
Estimated Growth Rate	Annual	2.20%	
Person per unit calculation		3.06	

Table 2
King Township Population Growth Estimate

Date	Population	Households
2001	18,533	6,050
2002	18,941	6,183
2003	19,357	6,319
2004	19,783	6,458
2005	20,219	6,600
2006	20,663	6,745
2007	21,118	6,894
2008	21,583	7,045
2009	22,057	7,200
2010	22,543	7,359
2011	23,039	7,521
2012	23,545	7,686
2013	24,063	7,855
2014	24,593	8,028

Table 3
Waste Quantity Provided by York Region

	Recycling										Waste (tonnes)	
	Fiber A	Fiber B	P.E.T.	HDPE mix	HDPE nat.	Aluminum Cans	Steel Cans	Clear Glass	Coloured Glass		Recycling Residue	Waste Disposal
Initial (tonnes)	637.88	351.1	25.52	9.54	4.21	11.31	36.38	71.64	82.52		60.12	4973.35
Initial (percentage)	10.2%	5.6%	0.4%	0.2%	0.1%	0.2%	0.6%	1.1%	1.3%		1.0%	79.4%
Sub-Total (tonnes)												
Sub-Total (percentage)												
						1230.10					5033.47	
						19.6%					80.4%	
Total (tonnes)							6263.57					

Table 4
Estimated Breakdown of Waste

Percent of Waste Generation Breakdown	Recycling					Landfill	Total
	Urban ¹	Organics	HHW				
	Rural ²	Organics	HHW				
		35.6%	44.7%	0.4%		19.3%	100.0%
		31.2%	36.2%	0.1%		32.5%	100.0%
Overall ³		32.8%	39.3%	0.2%		27.6%	100.0%

Note: ¹ Urban waste generation breakdown based on WDO waste Audits

² Rural waste generation breakdown based on WDO waste Audits

³ Overall waste generation breakdown based on the population

Table 5
Prior to Disposal, Waste Quantities Based on Waste Generation Breakdown

	Recycling	Organics	HSW	Landfill	Total
2003 ⁴	2,056	2,463	14	1,730	6,264
2004	2,102	2,517	14	1,768	6,401
2005	2,148	2,573	14	1,807	6,542
2006	2,195	2,629	15	1,847	6,686
2007	2,243	2,687	15	1,888	6,833
2008	2,293	2,746	15	1,929	6,984
2009	2,343	2,807	16	1,972	7,137
2010	2,395	2,868	16	2,015	7,294
2011	2,448	2,932	16	2,059	7,455
2012	2,501	2,996	17	2,105	7,619
2013	2,556	3,062	17	2,151	7,786
2014	2,613	3,129	17	2,198	7,958

Note: ⁴ Total Waste Quantity during 2003 based on data provided by York Region

R. J. Burnside & Associates Limited 15 Townline Orangeville ON L9W 3R4 Canada
telephone (519) 941-5331 fax (519) 941-8120 web www.riburnside.com

May 10, 2004

Township of King
King Centre Plaza
2075 King Road
King City, Ontario
L7B 1A1

Attention: Mr. Robert Flindall

Re: Strategic Planning for a
Solid Waste Collection System in the
Township of King
Step 1 – Briefing to Council
File No. LO 04 6432

Dear Mr. Flindall,

The Region currently landfills over 150,000 tonnes of waste annually in Michigan. To become less dependent on landfilling the Region has become committed to a three-stream waste management system. Organics are estimated to be nearly 40% of the entire waste stream in the Township of King. A three-stream collection system that includes the composting of organics is a major step in reducing this dependency.

Burnside has completed most of its preliminary data gathering work program. The only information outstanding, is the response from the Region. A copy of my letter to the Region, that summarizes the results of our meeting and our follow-on questions that require confirmation, was supplied previously and you may wish to include it in your briefing package. We appreciate your assistance and that of staff at the Township of King with Step 1 of this study. This briefing for your use is based on the data supplied to date by the Township and the preliminary information provided in our meeting with the Region of York (Region), April 6, 2004. Burnside has assembled information regarding your existing solid waste systems and other relevant data including some available background information on proposals provided by the Region. A letter summarizing some of the information was sent to you for review is included in a second letter to you also dated, May 6, 2004 entitled, *Strategic Planning for a Solid Waste Collection System in the Township of King, Step 1 – Compilation of Information*. This background information will be used in our proposed analysis and evaluation of collection systems (Step 2) as noted in our proposal. We would appreciate your review and approval for use of this data before we proceed with the

Step 2 study. Obviously the Township and Burnside will need the Region's reply before we proceed with Step 2.

Background on Proposals for New Collection System Needs

Burnside was retained to assist the Township with respect to modification of solid waste management plans proposed by the Region. York Region plans to implement a new solid waste diversion system that will require local municipalities to implement three-stream collection programs. As we understand the situation, local municipalities have the jurisdictional responsibility for collection programs and the Region has jurisdiction for management of the delivered waste materials.

The Region's new waste diversion initiatives will necessitate changes in the collection system currently operated by the local municipalities within the Region, if they wish to utilize Regional services offered.

Advantages for the Township to move to a Three Stream System

- It will enable the Township and its residents to fully utilize the Regional services offered. Their approach has been noted in their Public Communication Strategy dated April 5, 2004 that has been supplied to the Township
- The Minister of the Environment announced a consultation process to develop provincial policy to achieve 60% waste diversion by 2008
- The only means of achieving or potentially exceeding such a high waste diversion target is to commit to organic diversion, with an inclusive recycling program
- Extensive public educational programs are necessary to achieve the diversion rates proposed because all source separation collection systems depend on individuals separating their waste into the appropriate categories. The Region is planning to undertake this work therefore no direct costs to the Township
- Three-stream (organic, recyclables and residue waste) with commingled recyclable waste in one blue box container (as opposed to multiple boxes) has proven to be one of the most effective programs for ease of use by residents in a number of jurisdictions
- Other jurisdictions including those noted below in Ontario have achieved some of the highest diversion rates with three-stream systems

- It is the right thing to do from an environmental perspective and typically the majority of citizens support this type of initiative and the service benefits
- In our meeting the Regional representatives mentioned that they would plan (in the future following system implementation) to reject waste materials not properly source separated
- There will be long-term financial advantages to the Regional budget for every tonne of recyclable materials collected through WDO funding programs.

Disadvantages

- The Ministry of the Environment has had solid waste diversion policies in the past of 50% and did not enforce them
- Costs could be somewhat higher for local municipalities for collection of three-stream vs. single stream
- Experience has shown that there are always a few residents who don't like to source separate and recycle
- Acceptability of the program will depend in part on the quality of the Region's proposed education program and the system chosen
- Typically residents will be skeptical about any program changes initially and Council can expect some controversy, acceptance of the programs typically grows with time.

Burnside just completed its assistance with development of a similar three-stream system in the rural area of Southgate. This system has achieved great success to date with preliminary diversion rates recorded in the 70% range. A copy of an article about the system recently published in the magazine entitled, Solid Waste and Recycling is attached for reference.

There are several Ontario communities that have implemented a three-stream collection program. The following provides examples of communities and their reasons for implementing organic collection;

- As mentioned above, the Township of Southgate recently implemented three-stream curbside collection. The diversion of organics and recyclable materials will dramatically increase their landfill site life
-

- The City of Guelph operates the Wet- Dry service. The system was politically driven due to the difficulty in sighting a landfill, but is now a show-case for diversion systems
- Region of Peel began a three-stream collection program to reduce reliance on landfilling.

The Next Step in this Study

Burnside was retained by King to provide a limited and very focused evaluation of collection systems that will help to provide the information needed for the Township Council to make decisions and identify the best course of action. Based on this study, Burnside will provide the Township with information needed to help select a preferred three-stream collection system to be made based on the data provided.

Our proposed system analysis is limited in the alternatives examined in order to keep costs down for the Township. We are examining two main concepts each having two delivery options. The delivery options are either a privately contracted system or a Township owned and managed system. These two delivery options will be assessed equally. This creates four distinct options that will be evaluated in Step 2. On the basis of our evaluation in other jurisdictions we know that the systems identified below typically represent the lowest cost alternatives. Step 2 of the study will focus on advantages and disadvantages of each system. Each of the systems proposed for evaluation are proven and in use in various jurisdictions the first noted below is the three-stream collection system now operating in rural and urbanized areas of Southgate and some other jurisdictions

The cart or collection container (bags/boxes) including vehicle type and staff needs is an important factor in success of the program, costs and in collection problems that can result following implementation. Each system has advantages and disadvantages. We plan to supply information on advantages, disadvantages and cost estimates of the systems proposed below as part of the next step of study analysis and evaluation. The two alternative collection systems proposed each have two delivery options are described below:

1. The first system would consist of supplying three colour coded - 240 litre (63 gallon) carts to each residence along with a small kitchen catcher for organics. The blue cart for recycling, grey for waste and green cart for organics. The carts would be collected on a revolving schedule so that organics would be collected weekly and recycling and waste would be collected every other week. This allows for two stream trucks to be used for collection. For this alternative the trucks

would be outfitted with an automated arm that would be able to pickup the carts robotically.

2. The second system would consist of supplying each residence with a 49-litre (13 gallon) pail for weekly collection of organic waste and a small kitchen catcher. The system assumes recycling would be disposed of using the blue box and waste would be placed in clear garbage bags to allow for visual inspection. The same collection schedule would be used to allow for two stream collection vehicles to be used. The vehicles would require manual loading.

Based on the analysis of the alternatives above Burnside will comment on the possibility of system combinations for those evaluated. As mentioned above Burnside intends to provide a cost estimate along with the pro's and cons for each option. Both private and public sector services will be examined and evaluated.

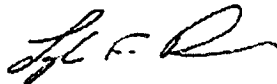
As mentioned previously to achieve the high diversion rates and meet the requirements proposed by the Region, the Township of King will require a three-stream collection system.

It is our understanding that HHW facilities and the educational programs will be provided by the Region. Presumably the collection systems monitoring and enforcement programs will be left to the local municipalities with respect to the operation of their collection system programs.

Step 2 of the *Strategic Planning for a New Solid Waste Collection System in the Township of King*, will focus on the two tested and practical three stream solid waste collection alternatives identified above, with comments on possible alternatives. Burnside will provide an analysis and evaluation of those alternatives and recommend a preferred system alternative or alternatives for consideration by Council.

Yours truly,

R. J. Burnside & Associates Limited



Lyle F. Parsons, B.E.S
Vice President, Burnside Environment

cc: Mr. Sean Quinlan, Burnside - Guelph Office
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By Lyle Parsons



Strategic Planning for Solid Waste Management

Southgate Township's new program should hit high diversion rates

In 2003 the Township of Southgate, Ontario launched its new solid waste collection, transfer, processing and disposal program. Southgate, located in Grey County about two hours north of Toronto, serves a mostly rural community. Its largest urban area is Dundalk with a population of approximately 1,500. The new system reduces costs, provides more equitable public service and is more environmentally sustainable than its predecessor.

The Solid Waste Committee Chairman and the Council have shown great leadership in the implementation of the new system. The new program is the result of a planning process that Southgate initiated in 2001 when it contracted Burnside to review its system. Its three landfill

sites had only three or four years of approved disposal capacity left, and shipped some waste to an adjacent township at relatively high costs. Only the residents of Dundalk received curbside waste collection; everyone else had to travel to local landfills or transfer stations, which sometimes represented a 46-km round trip. In 2001 the recycling programs only diverted 15 to 24 per cent of waste from disposal.

Burnside developed and evaluated over 30 different solid waste options, including contracted and municipally-owned and operated systems. Additional options included complete closure of sites and shipment to another site, as well as the existing system.

The new system

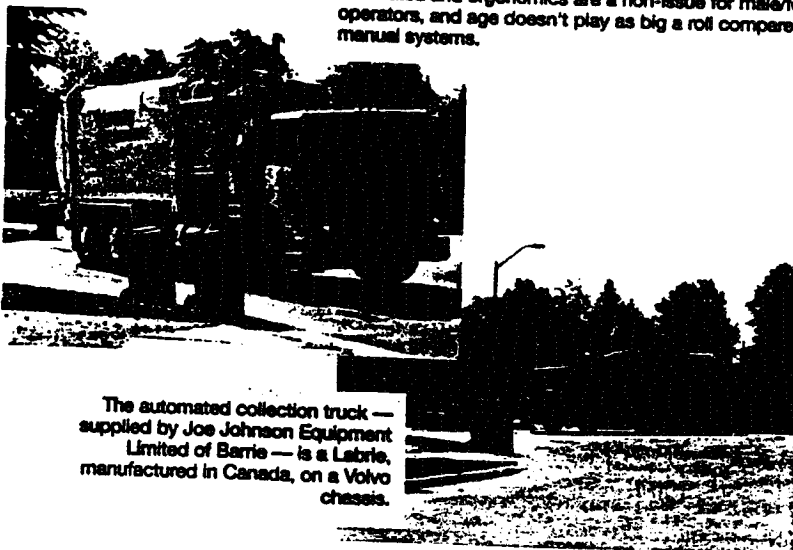
Southgate's new system can potentially divert up to 77 per cent of waste through a combination of recycling and composting. If residents and businesses participate, this high diversion rate will extend the life the key landfill at Egremont to 2070. Egremont Landfill is now the main site for disposal and recycling facilities, and has been designed to the latest environmental standards. A new site entrance and public drop-off station has been built along with an area for windrow composting. Most recyclables are shipped to Guelph's recycling facility.

Initial results are exciting. Sample weights collected for several weeks just after program implementation indicate that an estimated 70 per cent diversion rate is being achieved already.

At the same time as the program is more equitable, the cost per household will drop from \$161 for the previous system to just over \$120 per year. These costs include collection, carts, transfer facilities, roll-off truck and bin purchase, as well as operating costs for the landfill sites for their remaining lives, including post-closure care.

Starting in May 2003, residents and business owners were required to separate their waste into four different types: recyclable materials, organic/compostable materials, residue for disposal and HHW. The "four-stream system" was necessary because in order to hit diversion rates organic waste had to be dealt

The Cool Hand mechanical arm can collect both the 240- and 360-litre size IPL carts. The carts will be a cleaner and less expensive alternative to bags. Operators work in a climate controlled environment and never come in contact with refuse or sharps. Compensation claims are virtually eliminated and ergonomics are a non-issue for male/female operators, and age doesn't play as big a roll compared with manual systems.



The automated collection truck — supplied by Joe Johnson Equipment Limited of Barrie — is a Labrie, manufactured in Canada, on a Volvo chassis.

THE REGIONAL MUNICIPALITY OF YORK

Solid Waste Management Committee
April 14, 2004
Report of the
Commissioner of Transportation and Works
PUBLIC COMMUNICATION STRATEGY

1. RECOMMENDATION

It is recommended that:

1. Council approve the development and implementation of a strategy to educate the public and obtain their input into pending changes to the Region's waste management system as outlined in this report.

2. PURPOSE

This report summarizes recent developments in the Region's waste management plans, highlights key areas where decisions are required and outlines a strategy to educate and seek input from the public on these issues.

3. BACKGROUND

On March 27, 2003, staff submitted two reports to Council (Clauses 1 and 2 of Report No. 1 of the Solid Waste Management Committee) which provided a planning overview and update on the Region's Waste Management Strategy. Since that time, there have been a number of important developments affecting the Region's waste management system.

On March 10, 2004, Solid Waste Management Committee requested staff provide an update of the Region's waste management strategy. Committee further requested that staff prepare recommendations to work with the local municipalities to educate and consult with the public on pending program changes.

4. ANALYSIS AND OPTIONS

Development of the Region's waste management strategy began in 1997. At that time, the Region sought proposals on how to reach the target of 50% waste diversion by 2000. A variety of composting, energy from waste, new technologies and landfilling options were considered. The Region issued a series of Request for Information and Request for

Proposals in 1999 and 2000 to seek private sector firms to provide the required services and facilities.

Since that time, a number of important developments have transpired including closure of the Keele Valley Landfill Site, commitment by the Region to a three-stream waste management system and renewed efforts to explore new and emerging technologies to manage the Region's residual waste. Table 1 provides a chronological summary of key developments during this period.

Within the next eighteen months, the Region will begin implementing a household source separated organics (SSO) program and single-stream blue box collection. The new SSO and single-stream blue box collection programs are expected to permit the Region to achieve its goal of 50% diversion from landfill. However, the Province, City of Toronto and other regional governments have recently committed themselves to more aggressive goals including 60% diversion and higher. These new commitments are motivated by the very real possibility that the Michigan border will be closed to Canadian waste imports within the next five years.

Regional Council will have to decide if similar goals are to be endorsed locally and if the associated costs are warranted. On April 5, 2004, the Minister of the Environment announced a consultation process to develop provincial policy to achieve 60% waste diversion by 2008. If this goal is to be regulated by the Province or pursued locally, immediate action would be required to expand the Region's blue box program, improve diversion efforts and introduce new and emerging waste management technologies to deal with the residual waste.

These actions will not, however, provide a solution to the Region's dependency on landfilling its waste outside of its jurisdiction. The Region currently landfills over 150,000 tonnes annually of waste in Michigan. Should the border close, the Region only has a thirty day contingency plan to landfill its waste. The City of Toronto recently let a Request for Proposal to secure contingency landfill space in the event of a border closure and received no bids from existing private landfills in Ontario. The Minister of the Environment also introduced legislation on April 5, 2004 to rescind the environmental approvals and close the proposed Adams Mine Landfill Site. Other options to landfill significant quantities of waste in Ontario do not currently exist. These realities reduce the number and types of solutions that Council may have to consider and most alternatives to landfill typically face public opposition.

Table 1
Key Developments in The Region's Waste Management Strategy
2000 to 2004

Dates	Milestone
September 2000	Council adopted in principle the Rail Cycle North proposal for the use of the Adam's Mine Landfill Site.
November 2000	Rail Cycle North option for long-term waste disposal was cancelled, as Toronto did not enter into a contract.
April 2001	Three-stream waste diversion and collection system adopted by Council.
June 2001	Republic Services retained as one of the Region's long-term disposal sites in Michigan.
February 2002	Miller Waste Systems proposal for a transfer station and MRF on Bales Dr. in East Gwillimbury and on Hwy. 7 corridor accepted.
June 2002	Negotiations with Canada Composting Inc. to receive the Region's SSO ends unsuccessfully.
June 2002	Onyx Arbor Hills Landfill in Michigan and Green Lane Landfill in Ontario retained as short and long-term waste disposal sites for the Region.
December 2002	Closure of Keele Valley Landfill.
January 2003	Vaughan Small Vehicle Transfer Station and HHW Depot at Keele Valley commenced operation.
January 2003	The Region assumed all costs for waste transfer, disposal and recycling diversion processing from the local municipalities.
March 2003	Centralized composting facilities identified as a significant investment and commitment for the Region. Other potential partners and technologies were investigated as an alternative.
June 2003	Staff developed a sample waste collection by-law for local municipalities to ban the disposal of compostable yard waste.
June 2003	Staff reviewed possible locations for the HHW depot and SVTS in the south western area of York Region.
September 2003	Council identified that the amount of solid waste being shipped to Michigan needs to be reduced. The Region requested Provincial assistance to decrease the amount of packaging used by manufacturers.
September 2003	The Region began working jointly with the City of Toronto to solicit Expressions of Interest on New and Emerging Technologies.
December 2003	Vaughan Small Vehicle Transfer Station and HHW Depots are shut down and a search for a new location has begun.
January 2004	Development of an anti-litter campaign including strengthened anti-litter by-laws was begun.
January 2004	Council adopted motions to introduce a Goodwill reuse center at the Georgina transfer station and establish a permanent electronics recycling program.
January 2004	Council accepted a proposal by Halton Recycling to process 60,000 tonnes/yr. of household SSO and 20,000 tonnes/yr. of yard waste at their Newmarket facility for two years.
February 2004	Council approved banning collection of yard waste in plastic bags.

Moreover, in 2007 the Region's contract at the Onyx Landfill in Michigan will end and the Region will have to identify an alternative to dispose of the associated 100,000 tonnes of waste currently landfilled. A contract extension with Onyx is not an option as the site is expected to have reached capacity by 2007 but the Region could assign the tonnage to the Republic landfill in Michigan as an option under that contract.

An alternative to landfilling waste in Michigan may require that the Region and/or its service providers to undertake an Environmental Assessment if that solution is based in Ontario. An Environmental Assessment will take three to five years to complete and therefore Council must decide this year how the Region's residual waste will be managed if adequate time to develop interim and long term solutions is to be provided. Table 2 provides a summary of the key decisions during this timeframe.

Table 2
Possible Future Direction of the Region's Waste Management System

Issues	Options	Consequences
60% Waste Diversion	• Inclusion of 3-7 plastics and film into the blue box • Mandatory participation in the blue box program • Implementation of bag limits and user pay • Expanded yard waste collection • Collection of textiles and reusable goods at community environmental centers	20% projected increase in collection & processing costs Requires implementation by local municipalities Requires implementation by local municipalities Requires implementation by local municipalities Requires successful siting of facilities in each of the local municipalities
Onyx Landfill, Contract ends 2007	• Landfilling in a different willing host community • Assign the tonnage to our existing Republic landfill contract in Michigan • Construction of a local waste management facility that may include energy from waste technology	May face significant public opposition Quantity of waste exported to Michigan is not reduced Capital intensive and may face local opposition

Implementation of the new SSO and blue box programs and any option selected to manage the Region's residual waste will require considerable support from elected officials and residents. Therefore, a comprehensive community education and stakeholder input process is required.

4.1 Public Communications Strategy

The proposed strategy is intended to provide residents with an understanding of how the Region's waste management system has developed over the past decade and why. Residents will be given detailed information on the new SSO and single-stream blue box collection programs and an explanation of why their participation is so important. Finally, they will be provided with an overview of the challenges we currently face in managing the Region's residual waste and the possible options available to resolve them. Their comments on these options will be solicited and evaluated as the new programs are developed.

York Region will also be able to draw on the experience and learnings from Niagara Region, Hamilton and the City of Toronto on how they have dealt with similar waste management public communication issues over the past year. These communities are also working with their residents and stakeholders on how to minimize their dependency on landfills and if alternatives to landfill will be acceptable.

Staff from the Corporate Communications and Waste Management branches have developed the following strategy and will be working together to ensure a successful implementation if adopted by Committee and Council.

4.1.1 Issues to be Communicated

The proposed strategy is intended to communicate four key messages to the public as follows:

- Disposal of the Region's waste to landfills in Michigan is not a viable long-term solution.
- The new SSO and single-stream blue box programs are necessary to minimize the amount of waste generated by the Region and require public support to be successful.
- Maximizing diversion of waste will require establishment of local community environmental centers in neighbourhoods throughout the Region to collect reusable and recyclable materials that cannot be collected through the blue box.
- After all waste diversion options are implemented, there will still be waste requiring disposal and as a community we need to decide what to do with the residue and site the appropriate facilities. Energy from waste technologies and other new and emerging waste management technologies may need sited and constructed in the Region.

4.1.2 Proposed Stakeholder Groups

It is recommended that the following groups be involved in the process:

- York Regional Council.
- Local Municipal Councils.
- Local environmental groups.
- Regional residents and businesses.
- Local community and business groups.
- Local media.

4.1.3 Proposed Campaign Roll-out

The following time line is proposed:

April:

- Council approval of communications strategy.
- Presentation to Regional Council on the results of New and Emerging Technology RFP process and proposed communications strategy.
- Media release on outcome of the RFP process.
- Preparation of public communications materials.

May:

- Update Regional web site with background information for the public.
- Presentations to the local councils outlining the results of the RFP process and proposed communications strategy.
- Discussions with local municipal staff on the proposed strategy.

June:

- Combined Regional/local municipal councillor workshop to discuss management of residual waste in the Region.
- Modification of proposed public communications strategy based on Council and local municipal feedback.
- Meetings or focus groups with selected stakeholder groups.
- Public information sessions in the north and south of the Region.
- Inclusion of a feature article in York Works introducing issues and strategy to residents.

July:

- Public information sessions in Markham highlighting the new SSO and new single-stream blue box pilot.
- Promotion of the education campaign through newspaper ads, and displays in public spaces and shopping centers throughout the Region.

August:

- Provision of support to Markham staff in distributing information on the SSO pilot.

It is intended that Regional staff solicit assistance and involvement by elected officials and staff representatives of the local municipalities to deliver the proposed strategy. Regional staff will develop a report outlining the input received during the consultation process and any resulting recommendations to revise the waste management strategy to Committee and Council in the fall of 2004.

5. FINANCIAL IMPLICATIONS

The proposed communications strategy is expected to cost approximately \$150,000 as outlined in Table 3 and these costs have been included in the 2004 operating budget.

Table 3
Proposed Communications Strategy Budget

Expense	Projected Cost
Print Media Production	\$35,000
Councillor Workshops	\$20,000
Stakeholder Meetings / Focus Groups	\$10,000
Information Centers	\$10,000
Display Booth Production	\$25,000
Advertising	\$50,000
Total Projected Cost	\$150,000

6. LOCAL MUNICIPAL IMPACT

The Region's current waste management system is about to undergo significant change with the introduction of the three-stream waste collection system and provincial waste reduction targets. These changes will have a direct impact on local municipal collection practises. Extensive involvement and financial commitment by both levels of government will also be necessary to effectively communicate and implement these changes. It is recommended that local municipal staff be directly involved in preparing and delivering the proposed communications strategy.

7. CONCLUSION

The Region's waste management system has been evolving over the past three years and will need to continue to change in the future. Ensuring that the public is involved and understands the need for these changes is critical to maintaining their continued support and participation. The proposed communications strategy is intended to facilitate this process and is intended to be used as an effective tool to obtain public input and garner support for the decisions Council will be making this year on new program development and residual waste management.

The Senior Management Group has reviewed this report.

Prepared by:

Reviewed by:

Michael J. Birett
Manager, Program Development & Planning

Andrew Campbell, P.Eng.
Director of Solid Waste Management

Recommended by:

Approved for Submission:

Kees Schipper, P.Eng.
Commissioner of Transportation and Works

Michael R. Garrett
Chief Administrative Officer

April 8, 2004

MB/tp

File: P27/2004 Reports/April 14/Public Consultation Strategy Version 2



AE
MF
Operations & Asset Management
Community & Fire Services Commission

February 26, 2004

Mr. Andy Campbell, P. Eng.
Director Solid Waste Management
The Regional Municipality of York
17250 Yonge Street, Box 147
Newmarket, Ontario
L3Y 6Z1

Dear Mr. Campbell,

RE: MARKHAM'S PROPOSED 3-STREAM IMPLEMENTATION PROGRAM

Further to your letter of January 29, 2004, Town of Markham Council at its meeting on February 24, 2004, directed staff to continue to develop a 3-stream collection program. Council directed staff to phase in 3-stream collection over three years with Phase 1 implementation targeted for approximately 15,000 homes in September 2004.

In addition, Council directed that staff:

"Obtain guarantees from the Region by March 31, 2004, that SSO and co-mingled recyclables processing will be available September 2004 and confirmation of material acceptance criteria."

In order for Markham staff to prepare a report for Council on the issues, options, and financial considerations for implementing 3-stream collection in 2004 and beyond, the following information in writing is required from the Region of York as soon as possible and no later than March 31, 2004:

1. Confirmation of the date kitchen organics will be received at the Region's facility and detailed outline of the acceptance criteria for curbside collected kitchen organics;
2. Confirmation from the Region of York that SSO to be delivered to Miller Avenue Transfer Station
3. Confirmation from the Region of York that transfer cost for SSO from Miller Transfer Station to HRL Newmarket will be at Region's expense
4. Confirmation that the Region will or will not accept co-mingled recyclables at Regional or other facilities prior to commissioning the new MRF at Bales Ave.

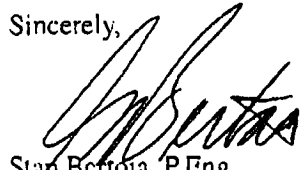
- 2 -

February 26, 2004

5. That Region of York will pay for any associated transfer costs related to implementing the 3-Stream program in addition to SSO transfer (ie. Residuals and recycling).
6. As per our meeting on February 17, 2004, that the Region of York confirm its funding commitment amount to Markham for 3-Stream Promotion and Education program

We appreciate your earliest attention and response.

Sincerely,



Stan Bertoia, P.Eng.

General Manager, Construction and Utilities

Copy to: John Livey, Chief Administrative Officer
Regional Councillor Jack Heath, Chair 3-Stream Committee
Jim Sales, Commissioner of Community and Fire Services
Peter Loukes, Director, Operations and Asset Management
Claudia Marsales, Manager, Waste Management
Kees Schipper, Commissioner of Transportation & Works

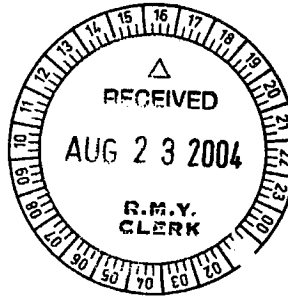


TOWN OF NEWMARKET

Corporate Services Department
information@town.newmarket.on.ca

August 20, 2004

Mr. Denis Kelly, Regional Clerk
The Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 4X1



REGION OF YORK
CLERK'S OFFICE

FILE No. - P27

Dear Mr. Kelly:

**RE: Public Works Report 2004-61
Implementation of the Three (3) Stream Waste Collection Program**

I am writing to advise that Public Works Report 2004-61 dated July 26, 2004 regarding the Implementation of the Three (3) Stream Waste Collection Program was considered at the August 9, 2004 Committee of the Whole Meeting. At the regular meeting held on Monday, August 16, 2004, the Town of Newmarket Council adopted the recommendations contained in the above referenced report.

I enclose a copy for your action as necessary.

Sincerely,

Anita Moore
Town Clerk

AM:adm

enclosure (1)

copy: J. Koutroubis, Director of Public Works & Environmental Services

"Newmarket, celebrating our heritage while capturing the promise of tomorrow"

395 Mulock Drive, P.O. Box 328, STN MAIN NEWMARKET, ON L3Y 4X7
Direct Dial: 905-953-5322 Tel: 905-895-5193 Fax: 905-953-5100

VISIT OUR WEB SITE AT: www.newmarket.ca



25.1
TOWN OF NEWMARKET
Public Works and Environmental Services Department
publicworks@town.newmarket.on.ca

5.2.2

CORPORATE SERVICES		
INCOMING MAIL	REFD TO	COPY TO
JUL 29 2004		

July 26, 2004

PUBLIC WORKS REPORT 2004-61

TO: Committee of the Whole

SUBJECT: Implementation of The Three (3) Stream Waste Collection Program
File No.: S.70

ORIGIN: Director of Public Works & Environmental Services

RECOMMENDATIONS

THAT Public Works and Environmental Services Report 2004-61 dated July 26, 2004 regarding implementation of the Three (3) Stream Waste Collection Program be received and the following recommendation(s), be adopted:

1. THAT the Town of Newmarket consider implementing the Three (3) Stream Waste Collection Program; Source Separated Organics (SSO), commingled recycling and waste/garbage in September 2005 subject to all the following conditions being satisfied;
 - a. That the Town of Newmarket requests the Region of York pay the capital costs for the purchase of reusable organic containers for each household within the Town of Newmarket;
 - b. That the Town of Newmarket requests the Region of York provide a public education and communication program for this new collection program within the Town of Newmarket;
 - c. Confirmation from the Region of York by September 2005 that there is sufficient capacity at the Halton Recycling Ltd. facility on Harry Walker Parkway South to handle the SSO from the Town of Newmarket.
 - d. Confirmation from the Region that the Region's new Materials Recovery Facility (MRF) on Bales Drive being fully operational to accept fully commingled recycling materials.
 - e. That sufficient funding and/or financing being approved to cover the additional administrative, collection and capital costs of this new three (3) stream collection program.

25.2

- f. That the new collection contracts being finalized and the required three (3) stream collection equipment being available to implement the three (3) stream collection program.
2. **AND THAT the Town of Newmarket requests the Region of York to formally provide status of the Town of Newmarket's previous request made in Recommendation 1. a) of C.A.O. and Finance Report 2002-11 dated February 14, 2002, for assuming all responsibilities with respect to Solid Waste Management.**
 3. **AND THAT the Town of Newmarket retain a consultant to prepare a new curbside collection contract for tendering in 2004 which includes the Three (3) Stream Waste Collection Program.**
 4. **AND THAT the Town of Newmarket Waste Bylaw # 1994-39 (as amended) be further amended to reflect changes in the Solid Waste Area.**
 5. **AND THAT the residents of the Town of Newmarket be advised of these new solid waste collection revisions in 2005.**
 6. **AND THAT the Region of York Council and all municipalities in York Region be provided with a copy of this report in order to be advised of the Town's commitment to Three Stream Waste Collection.**

COMMENTS

Report No. 2, Recommendation # 6, of the Region of York Solid Waste Management Committee dated January 14, 2004 requests the nine local municipalities to finalize and report on the design and proposed implementation date of their collection systems for Source Separated Organics (SSO), which creates a three (3) stream collection system in the Region. Please see Appendix "A" for more background on each of the above recommendations.

The Region of York is responsible for transfer and disposal costs of waste, processing costs for recyclables, yard waste material and organics processing starting in September 2004 (Markham pilot program) at Halton Recycling Ltd. in Newmarket. The Town of Newmarket is responsible for curbside collection costs; budgeted at \$2.0 million for 2004.

The Region of York on April 12, 2001 adopted a report to achieve 50% waste diversion from landfill. The Province of Ontario announced on April 5, 2004, the government's strategy on achieving 60% waste diversion in the province by 2008.

Presently, the Town of Newmarket collects waste materials in a two (2) stream system:

- 1) Recyclables separated into two blue boxes and 2) Waste/garbage in bags/cans.

THREE STREAM COLLECTION SYSTEM

Source Separated Organics (SSO) – Green Bin

Widely known as the third stream in curbside collection; residents will be asked to separate a large number of items from household waste for organic processing. Approximately 50% of household waste can be diverted to the third stream which includes such items as meat and bones, soiled papers, pet waste, sanitary products and food wastes (vegetables, food scraps, orange peels and egg shells). This material will be processed at Halton Recycling Ltd. See attached Schedule "B" for a detailed list.

Recycling – Blue Box

The Region of York's new Material Recovery Facility (MRF) and Transfer Station on Bales Drive will be built and operated under a contract by Miller Waste System. This new MRF to be completed and operational by July 1, 2005 is designed to accept additional recyclable materials. Residents will not sort the recyclables into a two (2) blue box system; this will be done at the MRF. See attached Schedule "C" for detailed list.

Waste/Garbage

Waste/garbage remains essentially the same, after curbside collection it will be delivered to the MRF/Transfer Station on Bales Drive, and then sent to Michigan for disposal. The introduction of SSO, additional recyclables and with the public's participation in this new program a reduction of bags/items at the curb will be realized. Currently, Newmarket has a three (3) bag/item limit with \$2.00 bags tags for additional items. With introduction of a three (3) stream collection system this will simultaneously allow a reduction of the current bag/item limit down to an initial two (2) bag/item limit that will require a recommended six (6) month educational or grace period before enforcement and will further encourage the public's participation in this diversion program. Based upon increased diversion rate records we would review the potential to further reduce the bag/item limit to one (1) bag/item.

BUSINESS PLAN AND STRATEGIC PLAN LINKAGES

Waste reduction, recycling and composting are linked to the environmental initiatives of the Town's Corporate Strategic Plan. The Town of Newmarket diversion rate for 2003 was 37.75% and have received the bronze award from the Recycling Council of Ontario for blue box diversion for the past four years.

The Town of Newmarket collected 14,840 tonnes of waste/garbage at the curb in 2003, recycling was 6,132 tonnes and yard waste was 2,362 tonnes.

BUDGET IMPACT (CURRENT AND FUTURE)

With these recommendations, the budget impact for 2004 is the cost of hiring a solid waste consultant for the collection contract tender preparation. A budget of \$5,000.00 was included in the 2004 budget and any additional consultant costs maybe covered within the 2004 Solid Waste & Recycling Budget and if required to complete the project that a budget be included in the 2005 Solid Waste & Recycling Budget.

25.4

A projected budget increase of \$729,000.00 for the 2005 Solid Waste & Recycling Budget will include the costs for the SSO containers (\$575,000.00), education and promotion (\$144,000.00), a second revision, printing and distribution of the Garbage & Recycle calendar in August 2005 (\$10,000.00). A new collection contract in September 2005 will see additional costs to the Solid Waste & Recycling collection budget.

A further follow up report to Council will identify the projected additional collection costs and capital financing of the required Green Bins. A budget driver for the 2005 budget year was already included as part of the 2004 budget preparations.



Jim G. Koutroubis, B.Eng., P.Eng.
Director of Public Works and Environmental Services

RS/JGK:wm

PW2004-61

25.5

Schedule 'A'

Recommendation 1. : That the Region of York has requested a July 1st, 2005 start date for SSO collection in conjunction with the opening of their new Material Recovery Facility (MRF) and Transfer Station on Bales Drive. A September 2005 start date in Newmarket gives us the advantage of introducing, promoting, delivering the containers for the start up after the summer vacation period and also ensures that the MRF on Bales Drive is in full operation. It's best if the public starts with this new program at one time rather than introducing a number of changes after it begins. The Town of Newmarket should participate in the Three Stream Waste Collection Program in September 2005 conditional upon Recommendations 1. a) to f) inclusive being satisfied. The costs associated with implementation of the three stream waste collection system will have an impact on the Town of Newmarket's budget. Refer to Budget Impacts.

Recommendation 1. a) : That the Town of Newmarket requests the Region pay for the purchase of the SSO (green) containers, which are provided to each household. These 46.5 litre rigid containers with wheels (30cm x 30cm x 60cm) have a locking lid and for the average household offer enough volume to hold a week's organic material. These containers used presently in Toronto and Markham's pilot program are easily stored by the resident and then wheeled to the curb for collection. Along, with this wheeled container each household is provided a in-kitchen collection container; which has how-to information imprinted on it and a plastic bag can be used inside this container and when filled taken and deposited in the large wheeled container.

The present market price for the cart container, in-kitchen collection container, how to use video, taxes and delivered to each household is currently \$25.00. At 23,000 households x \$25.00 each equals a cost of **\$575,000.00** and additional units will be required as new housing comes on line. The Town will need to adopt a policy on how damaged, lost or stolen carts/containers are replaced and at who's cost. Presently, only damaged blue boxes (\$6.00) are replaced free of charge.

The Region of York did pass at their Council on June 24, 2004 that "plastic bag breaking equipment not to be installed in the Bales Drive Materials Recycling Facility at this time." By not having the debagging equipment the area municipalities must still make available to its residents the blue boxes rather than residents being able to use bags.

Recommendation 1. b) : That the Town of Newmarket requests the Region of York provide a public education and communication program for this new collection program. To ensure the public's participation and commitment to the SSO program and additional changes that an intense education program is required to make it a success. The public must be aware on what day and what will be collected at the curb. The Region of York's Solid Waste Management Committee has stated it has budgeted money for such a program. Industry standards place a \$2.00 per person for such a promotion x 72,000 population equals a cost of **\$144,000.00** to The Town of Newmarket.

Recommendations 1. c), d), e) and f): as indicated under each recommendation.

25.6

Recommendation 2. : AND THAT the Town of Newmarket requests the Region of York to formally provide status of the Town of Newmarket's request in Recommendation 1. of C.A.O. and Finance Report 2002-11 dated February 14, 2002 (Council Extract attached) to assume all responsibilities regarding Solid Waste Management. The Region of York and the area municipalities did participate in series of governance in 2003 meetings to determine who had authority to deliver and manage the disposal, processing and collection systems. The meetings were discontinued with no final recommendations.

Recommendation 3. : That the Town of Newmarket retain a solid waste consultant to prepare a new curbside collection contract for tendering with the three stream collection system, investigate industry standards for collection payment (tonnage or per capita), contractor equipment required, review our collection routes and scheduled pickup days. Our present contract with LaRue's Waste & Recycling (Capital Environmental Resource Inc. Company) was extended from May 31, 2004 for a one year period and then on monthly basis until December 31, 2005 (written cancellation notice is included). Awarding the collection contract early in 2005 enables the successful contractor to attain the equipment required for a startup in September.

Recommendation 4. : That the Town of Newmarket Waste Bylaw # 1994-39 (as amended) is amended as required reflecting changes in the Solid Waste Area. Our present bylaw which also includes filling and clearing of property (Building & Bylaws Dept) should be a stand alone Solid Waste Bylaw. The Region Of York has requested that the area municipalities review and update their bylaws to reflect current policies and practices required and to ensure enforcement measures are included. The Region is to provide a template of a bylaw to the area municipalities, which has not been forwarded as of this date. The Town could include such a review with the consultant's requirements in Recommendation 3. along with our Legal Services Department input.

Recommendation 5. : That the public be advised of these new changes in 2005. As in Recommendation 1. b) that a major education and promotion program must be communicated to the public through various media and information systems. The Garbage & Recycling Schedule that is revised, printed and distributed in January of each year should show the schedule for months from January to August 2005; and a new revised schedule be printed and distributed in August 2005 for September to December 2005 period showing the new three stream collection program.

Recommendation 6. : That the Region of York Council and all municipalities in York Region be provided with a copy of this report in order to be advised of the Town's commitment to the three (3) stream collection and waste diversion programs.

25.7**Schedule 'B'****ACCEPTABLE - SOURCE SEPARATED ORGANIC MATERIALS**

Material Category	Materials List
Paper fibers	SOILED PAPER TOWELS <u>TISSUES</u> Soiled paper food packaging items which would include: • Newspaper (e.g. fish & chip/corn husking wrap) • Cardboard (e.g. frozen pizza base) • Boxboard (e.g. Chinese food taken out carton) • Mixed papers (e.g. paper candy wrapper/microwave popcorn bag) • Moulded pulp (e.g. egg carton/carry out tray) • Kraft paper (e.g. meat wrap) • Polycoat containers (e.g. microwave paper trays/ice cream box)
Food	All food materials including fresh, frozen, dried, cooked and prepared foods and leftovers Fruit and vegetable scraps Meat and fish products including skins, fat and entrails Pasta, bread and cereals Coffee grinds and filters and tea bags Egg shells Candy and confectionery products Any other consumable food item including pet food
Sanitary	Diapers, sanitary and incontinence products
Misc.	Houseplants including plant material and soil Animal waste and litter or bedding

25.8

Schedule 'C'

ACCEPTABLE – RECYCLING MATERIALS

Glass Bottles and Jars

Metal Food Cans

Metal Beverage Cans

Milk and Juice Gable Top Containers

Plastic Bottle and Jugs
#1pete & #2 HDPE

Paper Rolls (toilet & paper towels)

Tetra Pak – Aseptic Containers

Newspaper and Inserts

Magazines and Catalogues

Household Paper and Junk Mail

Hard and Soft Cover Books

Telephone Books

Paper Egg cartons

Kraft Paper – Brown Paper Bags

Corrugated Cardboard – tied or bundled

Boxboard (cereal, detergent & shoe boxes)

* Empty – Aerosol Cans

* Empty – Metal Paint Cans

* Plastic Tubs and Lids

* Polystyrene packaging

* Film plastic shopping bags

* Rigid plastic containers with resin codes #3 to #7

* To be collected when the MRF on Bales Drive opens in 2005.

25.9

TOWN OF NEWMARKET COUNCIL - EXTRACT - MONDAY, FEBRUARY 25, 2002					
	REF'D TO	COPY TO		REF'D TO	COPY TO
Mayor Taylor			Building & Bylaws, Dir. of		
Reg. Councillor Humeniuk			Corporate Services, Dir. of		
Councillor Kerwin			Engineering, Town		
Councillor Scott			Finance, Dir. of		
Councillor Snow			Fire Chief		
Councillor Springstein			Legal Services, Dir. of		
Councillor Van Bynen			Parks, Recreation & Culture, Dir. of		
Councillor Vegh			Planning, Dir. of		
Councillor Woodhouse			Public Works and Environmental Services Dir. of		
			Town Clerk		
CAO					
Human Resources			Communications Officer		
			Information Systems Manager		
PENDING AGENDAS: COW			Purchasing Manager		
COUNCIL			OTHER:		
JCC					
Letter: File:			ORIGINAL REPORT IN DEPARTMENT BINDER	✓	

**11. COMMITTEE OF THE WHOLE – FEBRUARY 18, 2002 – ITEM 6
CAO AND FINANCE REPORT 2002-11
BUDGET 2002 AND BEYOND**

THAT CAO and Finance Report 2002-11 dated February 14, 2002 regarding Budget 2002 and Beyond be received and the following recommendations be adopted:

- 1. THAT the following 2001 Budget Recommendations be reconfirmed and pursued again in the year 2002:**
 - a) THAT the Regional Municipality of York be requested to assume responsibility for Waste Management including waste collection in a manner which meets the waste collection service levels desired by the Area Municipalities; the collection service level costs to be area-rated by the Region as a Regional Charge-back to the Area Municipalities, as in the Regional Municipality of Halton;**
 - b) AND THAT the Regional Municipality of York be requested to assume responsibility for Fire and Emergency Services within York Region as a single tier urban/rural/volunteer service OR as an urban/full time service in the affected Area Municipalities with the costs to be area-rated by the Region as a Regional Charge-back to the Area Municipalities with urban/full time fire and emergency service.**
 - c) (i) AND THAT the Province of Ontario be requested to provide financial assistance on a transitional basis to the Town of Newmarket to assist it with its problems related to growth and in recognition of its particular financial difficulties at this**

25.10

TOWN OF NEWMARKET COUNCIL - EXTRACT - MONDAY, FEBRUARY 25, 2002					
	REF'D TO	COPY TO		REF'D TO	COPY TO
Mayor Taylor			Building & Bylaws, Dir. of		
Reg. Councillor Humentuk			Corporate Services, Dir. of		
Councillor Kerwin			Engineering, Town		
Councillor Scott			Finance, Dir. of		
Councillor Snow			Fire Chief		
Councillor Springstein			Legal Services, Dir. of		
Councillor Van Bynen			Parks, Recreation & Culture, Dir. of		
Councillor Vegh			Planning, Dir. of		
Councillor Woodhouse			Public Works and Environmental Services Dir. of		
			Town Clerk		
CAO					
Human Resources			Communications Officer		
			Information Systems Manager		
PENDING AGENDAS: COW			Purchasing Manager		
COUNCIL			OTHER:		
JCC					
Letter: File:			ORIGINAL REPORT IN DEPARTMENT BINDER	✓	

time so as to avoid significant tax increases in 2003 and the years beyond.

(ii) AND THAT the Province of Ontario be requested to take other helpful actions for the long term betterment of municipalities like Newmarket such as:

- (1) providing other sources of tax revenue such as portions of the gas consumption tax for road construction and maintenance, and the sales tax, and hotel occupancy tax; and
- (2) providing for returnable bottle and packaging deposit systems to better capture the cost of waste diversion than the present costly recycling systems; and
- (3) providing fixed easily understood infrastructure subsidy programs on the capital and operating sides as compared to the complex SuperBuild program which is not easily accessed by smaller municipalities like Newmarket without significant upfront cost in effort and expense in putting together partnerships and submissions; and
- (4) avoiding more "statutory downloading" of provincial initiatives without corresponding financial support such as the Municipal Performance Measurement Program, the BRAGG (Buildings) Report, the new Municipal Act, increased regulatory requirements re: water quality initiatives, Brownfields initiatives, natural

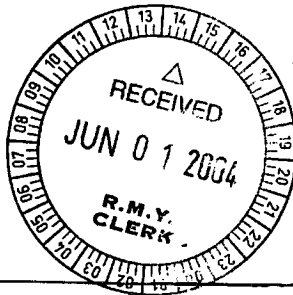
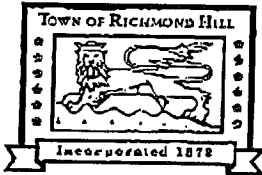
25.11

TOWN OF NEWMARKET COUNCIL - EXTRACT - MONDAY, FEBRUARY 25, 2002					
	REF'D TO	COPY TO		REF'D TO	COPY TO
Mayor Taylor			Building & Bylaws, Dir. of		
Reg. Councillor Humeniuk			Corporate Services, Dir. of		
Councillor Kerwin			Engineering, Town		
Councillor Scott			Finance, Dir. of		
Councillor Snow			Fire Chief		
Councillor Springstein			Legal Services, Dir. of		
Councillor Van Bynen			Parks, Recreation & Culture, Dir. of		
Councillor Vagh			Planning, Dir. of		
Councillor Woodhouse			Public Works and Environmental Services Dir. of		
			Town Clerk		
CAO					
Human Resources			Communications Officer		
			Information Systems Manager		
PENDING AGENDAS: COW			Purchasing Manager		
COUNCIL			OTHER:		
JCC					
Letter: File:			ORIGINAL REPORT IN DEPARTMENT BINDER	✓	

heritage initiatives, waste diversion initiatives, hydro market initiatives, fire service guidelines etc.

2. AND THAT staff continue to pursue revenue maximization within each of the budget areas through appropriate user fees and charges to try and ensure as much cost recovery in all areas so as to minimize future property tax requirements.
3. AND THAT staff in all departments (Parks, Recreation and Culture, Public Works and Environmental Services) continue to diligently pursue grants, partnerships, sponsorships, donations, contributions, volunteer programs to help offset program and service level costs in the future.

File: 4.2.2



Town of Richmond Hill

P.O. Box 300

225 East Beaver Creek Road

Richmond Hill, Ontario

Canada L4C 4Y5

(905) 771-8800

Website Address: www.town.richmond-hill.on.ca

FAX COVER SHEET

To: DENIS KELLY, REGIONAL CLERK

**REGION OF YORK
CLERK'S OFFICE**

Date: _____

FILE No. - 127

Company: _____

Fax No.: (905) 895-3031

From: GLORIA Y3619

(Name, Department, Phone No.)

Total No. of Pages: 4 (including cover page)

Comments:

THIS INFORMATION HAS BEEN FORWARDED TO YOU AT

THE REQUEST OF REGIONAL AND LOCAL COUNCILLOR BARROW

FOR TOMORROW'S WASTE MANAGEMENT MEETING.

THANK YOU.

NOTE: The information contained in this transmission may be PRIVILEGED and CONFIDENTIAL. It is only for the above named. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly PROHIBITED. If you have received this communication in error, please notify us IMMEDIATELY by telephone and return the original message to us at the above address via the postal service. Naturally we will reimburse you for your postage and long distance expense. Thank you.

Agenda Item 3.0

May 18, 2004

A meeting of the Waste Management Task Force was held on Tuesday, May 18, 2004, at 9:00 a.m. in the Mayor and Councillors' Board Room with the following Members in attendance: Mayor Bell (Chair), Regional and Local Councillor Hogg, B. Macgregor, I. Brutto and J. Meggitt. R. Fritzsche, Waste Reduction Coordinator and L. Conde, Assistant Clerk, were also in attendance.

Adoption of Agenda

Moved by: B. Macgregor

That the agenda be adopted as distributed by the Clerk.

Carried Unanimously

Minutes of Previous Meeting

Moved by: I. Brutto

That the minutes of the Waste Management Task Force meeting held April 20, 2004 be received.

Carried Unanimously

Collection Ban of Clear Plastic Bags for Yard Waste - (SRW.04.009)

Members discussed opportunities for providing information to residents on yard waste collection aside from the Engineering and Public Works calendar. Mayor Bell suggested that notification of this initiative be inserted in water bills.

Moved by: J. Meggitt

- Rec. 1 a) That effective January 1, 2005, acceptable yard waste containers include kraft paper yard waste bags, cardboard boxes or rigid reusable containers for the collection of leaves and yard waste;
- b) That the existing Waste Management By-law 186-80 be amended effective January 1, 2005, to ban all plastic bags for the collection of yard waste as requested by the Region of York;

(continued)

Waste Management Task Force - May 18, 2004
Page 2

- c) That a copy of this resolution be forwarded to the Region of York.

Carried Unanimously

"Michigan dumpsite contract is sweet for city" - Globe and Mail - dated May 12, 2004

Moved by: I. Brutto

That the May 12, 2004 article from the Globe and Mail titled "Michigan dumpsite contract is sweet for the city", be received.

Carried Unanimously

Correspondence from the Regional Municipality of Niagara - Request for Support of Resolution - Niagara-Hamilton Waste Plan - Request for Provincial Action in the areas of Diversion and Environmental Assessment - dated May 5, 2004

Moved by: Regional and Local Councillor Hogg

That the correspondence from the Regional Municipality of Niagara regarding a request for support of a resolution seeking Provincial action in the areas of diversion and environmental assessment be referred to Engineering and Public Works Staff for a report back to the Waste Management Task Force.

Carried Unanimously

Commencement of Three Stream Waste Collection - (SRW.04.013)

Members discussed the need for confirmation of collection plans in advance of the publication of the 2005 Engineering and Public Works calendar and its distribution to Richmond Hill residents. There was further discussion on new recyclable materials for collection, as well as the design of the containers for organics collection.

Moved by: Regional and Local Councillor Hogg

- Rec. 2 a) That effective July 1, 2005, the Town proceed with the collection of both source separated organics and commingled recycling providing that the Region of York confirm by no later than September 1, 2004, the ability to receive both source separated organics and commingled recycling from the Town at a south urban area transfer facility by July 1, 2005;

(continued)

Waste Management Task Force - May 18, 2004

Page 3

- b) That, in order to expand the range of recyclable materials and reduce litter from loose recyclable material placed out for collection in blue boxes, the Region of York be asked to confirm the ability to accept the delivery of commingled recyclables in bags no later than September 1, 2004 and that the Region of York also be asked to initiate an "All Bottles and Tubs" program.

Carried Unanimously

Bruce Macgregor, Commissioner of Engineering and Public Works, indicated that he would contact Members of Council to determine if there was availability for a workshop on this issue prior to the report and recommendation being dealt with at the May 31, 2004 Council meeting.

Motion to Move into Closed Session

Moved by: B. Macgregor

That the Waste Management Task Force move into closed session to discuss litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board.

Carried Unanimously

The Task Force moved into closed session and returned to open session (10:00 a.m.-10:10 p.m.).

Date of Next Meeting

The next meeting of the Waste Management Task Force will be held at the call of the Chair.

Adjournment

Moved by: Regional and Local Councillor Hogg

That the meeting be adjourned.

Carried Unanimously

The meeting adjourned at 10.15 a.m.



TOWN OF
WHITCHURCH-STOUFFVILLE
"COUNTRY CLOSE TO THE CITY"

REGION OF YORK
CLERK'S OFFICE

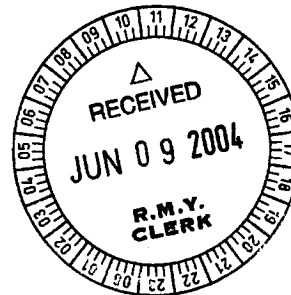
FILE No. - *127*

37 SANDIFORD DRIVE, 4TH FLOOR
STOUFFVILLE, ONTARIO L4A 7X5

MAIN SWITCHBOARD (905) 640-1900
(905) 895-2423
AUTOMATED LINES (905) 640-1910
(905) 895-5299
FAX (905) 640-7957

June 4th, 2004

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



Dear *Denis* Mr. Kelly:

**RE: WASTE MANAGEMENT - HOUSEHOLD SOURCE SEPARATED ORGANICS
COLLECTION PROGRAM (C10-PW & E07)**

Please be advised that the above-noted matter was placed before Council at its meeting held on June 1st, 2004.

It was the decision of the Council, at that time, to pass the following resolution:

"THAT in order to achieve a higher waste diversion rate, Council approve the collection of source separated organics (SSO) commencing in September 2005 subsequent to the opening of the Bales Drive Transfer Station and Material Recovery Facility;

AND THAT the present Waste and Recycling Collection contract (which terminates February 28th, 2005) with Miller Waste Systems be negotiated for an extension to September 2005;

AND THAT Council approve a collection frequency for the new contract as follows:

- Organics SSO - weekly
- Residual Waste - weekly
- Recyclables - every other week;

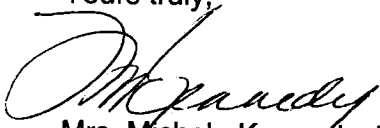
AND THAT the Region of York subsidize the capital costs of the purchase of organic re-usable containers for each household, and provide funding for education and promotion;

AND THAT a copy of this report and Council's recommendations be forwarded to the Region of York.

- Page 2 -

AND THAT the Environmental Advisory Committee be asked to look into ways to promote backyard composting."

Yours truly,

A handwritten signature in cursive script, appearing to read "M. Kennedy", written in black ink.

Mrs. Michele Kennedy, B.A., C.M.O.
Town Clerk

MK/sw

copy: Whitchurch-Stouffville Environmental Advisory Committee
Mr. Don Chubbuck, Chairperson

REPORT #10

**WASTE MANAGEMENT - HOUSEHOLD SOURCE SEPARATED ORGANICS
COLLECTION PROGRAM (C10-PW & E07)**

Report Prepared By: Director of Public Works

RECOMMENDATION:

The Director of Public Works recommends:

THAT in order to achieve a higher waste diversion rate, Council approve the collection of source separated organics (SSO) commencing in September 2005 subsequent to the opening of the Bales Drive Transfer Station and Material Recovery Facility;

AND THAT the present Waste and Recycling Collection contract (which terminates February 28th, 2005) with Miller Waste Systems be negotiated for an extension to September 2005;

AND THAT Council approve a collection frequency for the new contract as follows:

- Organics SSO - weekly
- Residual Waste - weekly
- Recyclables - every other week;

AND THAT the Region of York subsidize the capital costs of the purchase of organic re-usable containers for each household;

AND FURTHER THAT a copy of this report and Council's recommendations be forwarded to the Region of York.

BACKGROUND:

At a January 2004 meeting of Regional Council, the following recommendation was adopted:

"Council request the nine local municipalities to finalize and report back to Regional Council by May 2004 on the design and proposed implementation date of their collection systems for source separated organics with implementation occurring no later than July 1st, 2005."

In April 2001, the Region resolved to implement the three-stream waste management system with agreement in principle from the nine local municipalities. The three-stream waste collection system will consist of:

- ▶ commingled blue box materials (including additional materials)
- ▶ household source separated organics (SSO) - wet - (fruit and vegetable scraps; meat and fish products including skins, fat and entrails; pasta, bread and cereals; dairy products; coffee grinds, filters and tea bags; egg shells; candy and confectionary products)
- ▶ residual waste - dry

In order to achieve a higher waste diversion rate and reduce the amount of waste required to be land-filled, it is estimated that implementing the above plan across the Region would enhance the present diversion rate from 23% (Whitchurch-Stouffville at 25.9%) to over 41% bringing the Region within reach of the 50% target set by the province ten years ago.

The province just recently announced a consultation process to develop a policy to achieve a 60% waste diversion by the year 2008. As well, the province has committed publicly to mandate SSO collection within the next five years which will include designs for collection from apartments, multi-residential and commercial establishments.

Short Term Management Plan of SSO

The Region has entered into an agreement with Halton Recycling Limited (HRL) to receive and process municipality collected SSO and yard waste at the former Canada Composting Inc. facility on Harry Walker Parkway in Newmarket. It is anticipated that this facility will have any past problems resolved and be fully operational by the summer of 2004. The City of Toronto recently signed a contract with HRL to receive a portion of their SSO commencing in the fall of 2004.

Contingency plans will be developed between the Region, the Region of Durham and private contractors should HRL encounter operational problems at the Newmarket facility. In order to plan and budget to receive and process SSO from the area Municipalities, the Region requests the area municipalities to confirm their program design and anticipated start date for collection of SSO.

Long Term Management of SSO

The Region has entered into a joint request for proposal (RFP) with the Region of Durham and City of Toronto to secure sufficient capacity to receive and process SSO in the future. It is anticipated that this will be a 3-5 year implementation plan.

Present Collection, Processing and Disposal System

In January 2003, the Region assumed responsibility for costs associated with waste transfer, disposal and recycling processing from the area municipalities.

The municipalities remain responsible for all costs associated with collection and transportation to designated Region facilities.

The present waste collection system flow chart which is shown on Attachment A consists of residual waste, large articles including white goods, yard waste and recyclables. Currently the blue box material is sorted into five material types (paper, food and beverage containers, clear glass, coloured glass and cardboard) at the curb by the recycling truck driver. The material from the Whitchurch-Stouffville Recycling Depot is transported directly to the Material Recovery Facility (MRF).

Proposed Collection, Processing and Disposal System

The new three stream system includes the separation of SSO from the waste stream and an enhanced commingled blue box program. The proposed waste collection system flow chart as shown on Attachment B consists of the SSO and waste or recyclables collected in a two compartment vehicle. Large articles and yard waste collection would be collected in the same manner depending on the approved service level.

The commingled blue box materials which will include additional items such as aerosol cans, empty paint cans, plastic tubs and lids, tetra-pak containers, gable-top containers and aluminium foil will be processed at the new material recovery facility located on Bales Drive in East Gwillimbury. This new facility is anticipated to be operational in July 2005. This site will also serve as a transfer station for waste and SSO. In addition, the Region has approved contracts with Miller Waste Systems to transfer waste and SSO from its Markham transfer station until 2006. A long-term transfer station will be built in the southerly part of the Region starting in 2007. Whitchurch-Stouffville waste and SSO will be transported to the Bales Drive transfer station.

In designing this new three stream waste collection system and its impact on the residents of Whitchurch-Stouffville, the following must be considered:

- collection frequency for SSO, waste and recyclables
- SSO collection method - re-useable container
- blue box capacity
- new waste collection contract

- ▶ promotion and education campaign
- ▶ revision to By-law 93-116 - Collection and Removal of Garbage

Collection Frequency

SSO must be collected weekly due to the type of organic material and the "yuck" factor. At the present time, waste, which includes SSO, is collected every week. As for recycling, it may be necessary to move from every other week collection to a weekly collection if additional items as mentioned in this report are added to the blue box program.

Option 1

- i) SSO - weekly
- ii) waste - every other week
- iii) recyclables - every other week

Comment - Most cost effective plan. Approximate 5% reduction in costs from the present collection costs for the same materials. Blue Box capacity concerns.

Option 2

- A) SSO - weekly
- B) waste - weekly
- C) recyclables - every other week.

Comment - Approximate 5% increase in costs from the present collection costs for the same materials. Similar to present system. Blue Box capacity concerns.

Option 3

- 1) SSO - weekly
- 2) waste - weekly
- 3) recyclables - weekly

Comment - Approximate 13% increase in costs from present collection costs for the same materials. Increased level of service therefore probably the preferred option by residents. Encourages diversion in recycling.

Yard Waste/Large Article Collection

At the May 18th Council meeting, the issue of additional yard waste collection days in the months of July, August and September for a total of seven collections per year has been sent to the Environmental Advisory Committee for review and recommendations.

At the 2004 Operating Budget meeting Council discussed the cost savings associated with a reduction in large article collection by fifty percent (50%) for a total of six (6) collections per year.

A change in the large article collection could also be considered in the new contract such as:

- collection of one or two large article items (no white goods) per weekly waste collection with no 'call in' required. White Goods would be collected on a 'call-in' basis as per a set schedule.
- large articles and white goods collected by a 'call-in' basis and the purchase of a sticker (\$10.00 per item) for all items placed at curb side with a maximum limit.
- no large article collection provided. Residents could dispose of items at specific locations in York Region or utilize the services of contractors.

The savings in large article collection would more than compensate for the proposed increase in yard waste collections.

SSO Re-usable Containers

Many area municipalities are considering supplying re-usable containers to every household. These units which are typically smaller than a waste container have a secured air-tight lid and can be purchased with or without wheels for an approximate cost of \$25.00 each.

Included in the costs is an under the counter 'kitchen catcher'. A majority of the residents use plastic grocery bags to hold the organics within the container. Plastic bags can be removed in the SSO processing. The above description pertains to the container purchased for 70,000 households in the City of Toronto.

Providing containers to single family households would cost the municipality in the order of \$190,000 and could be cost prohibitive if provided to the residents free of charge without subsidy. In addition there is the staff time and costs to administer the issuance of new containers similar to the blue box.

Alternatively, a green transparent bag or specially marked bag could be supplied to residents or purchased from the Town. The concern with using bags for SSO is the contents are very inviting and easily accessible for animals.

Blue Box Capacity

Implementing additional blue box items and remaining on a every other week

collection program may result in capacity concerns from residents. Storage for waste, blue boxes and a SSO re-useable container (if approved) in some households will be limited. Blue boxes set out on windy days, during winter storms and inclement weather are other concerns of the blue box.

Storage capacity could be solved by providing weekly collection. The program could commence on every other week collection then move to a weekly collection as more items are added to the blue box.

Some residents may wish to use blue transparent bags for recyclables. Since the material is commingled, the blue bags offer a secure and dry set out of materials at the curb for a very low cost, however, the Region has indicated that plastic bags in the recycling stream are not acceptable.

Waste and Recyclable Collection Contract

The present contract (fourth option year) expires February 28th, 2005. The new Bales Drive facility will not be operational until July 2005. In order to roll out a new program, it would be advantageous to wait until late summer such as mid-September.

It is recommended that the present collection contract be extended to September 2005 and that the new contract (seven year contract to allow for the contractor's truck purchases to be fully amortized) be prepared and tendered in early 2005.

A staff report will be prepared for Council's consideration on the details of the new waste and recycling collection contract.

Promotion and Education

The Region has committed to promoting the new SSO and expanded blue box programs as the Region has the responsibility to dictate what material is eligible and how it is delivered to their facilities.

Staff presently utilize the Town Page, the web page and newspaper articles for promotional notices to the public.

Embarking on a new collection contract and new programs (SSO and expanded blue box) will require an enhanced promotion/education campaign. Information calendars, flyers etc. prepared and mailed out would cost in the order of \$7,000.

Details of this campaign will be presented in a future report to Council once a program has been approved.

Collection and Removal of Garbage By-law 93-116

The present by-law will be revised to reflect the new three stream collection program as approved by Council.

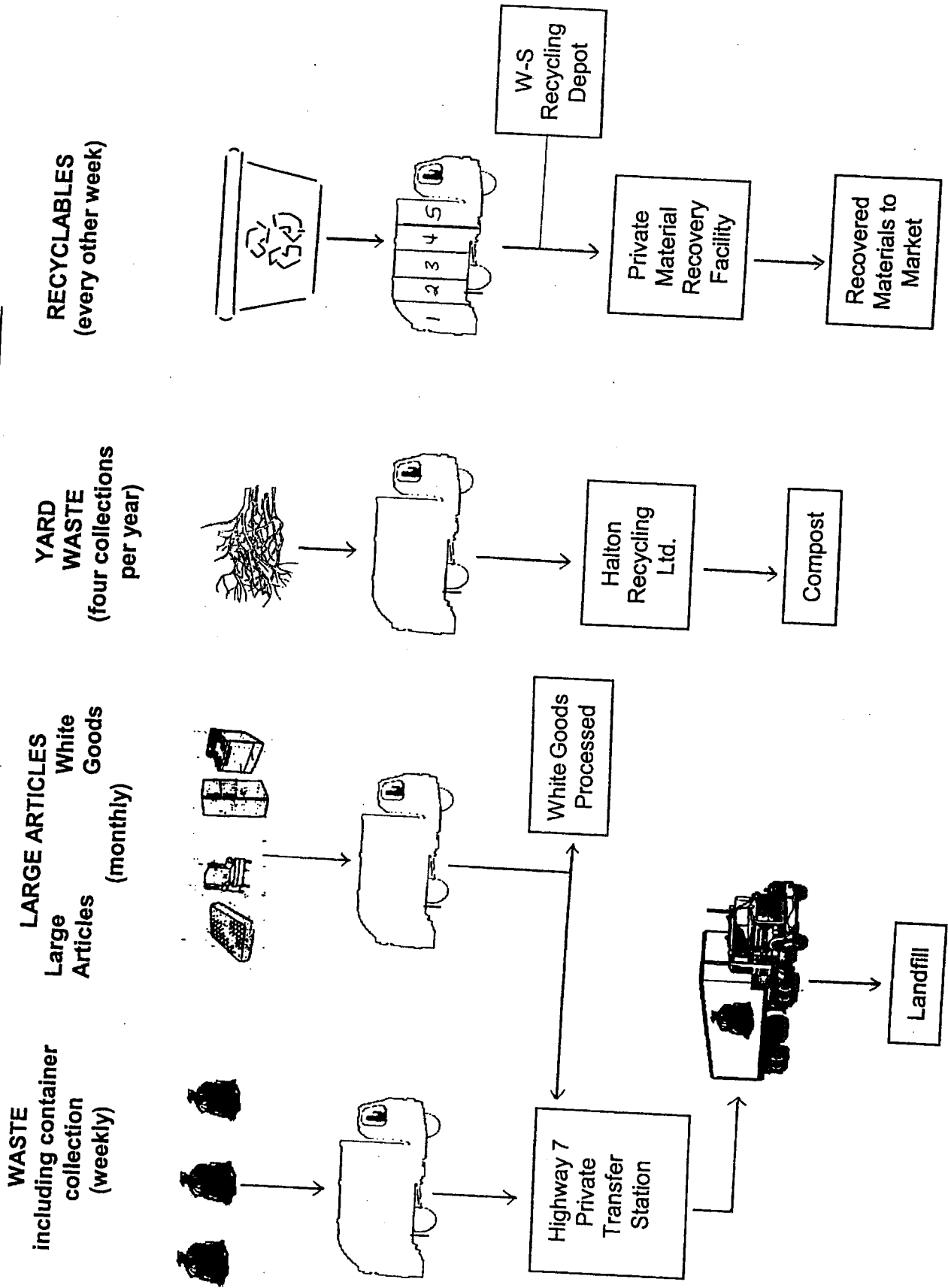
Financial Implications

The following is a breakdown of the new three stream collection program estimated costs variation compared to the present contract for the same materials. These costs are based on a new program start in September 2005. An annual cost variation is shown for the year 2006.

Description	2004 Budget (waste/recycling collection)	Estimated Budget Increase for 4 months (2005)	Estimated Budget Increase for 12 months (2006)
1) SSO, Waste and Recycling Collection			
1a) <u>Option 1</u> - - SSO - weekly - waste - every other week - recycling - every other week	\$786,800	(\$13,100)	(\$39,400)
1b) <u>Option 2</u> - - SSO - weekly - waste - weekly - recycling - every other week	\$786,800	\$13,100	\$39,400
1c) <u>Option 3</u> - - SSO - weekly - waste - weekly - recycling - weekly	\$786,800	\$34,100	\$102,280
2) Promotion and Education	—	\$7000	\$2000

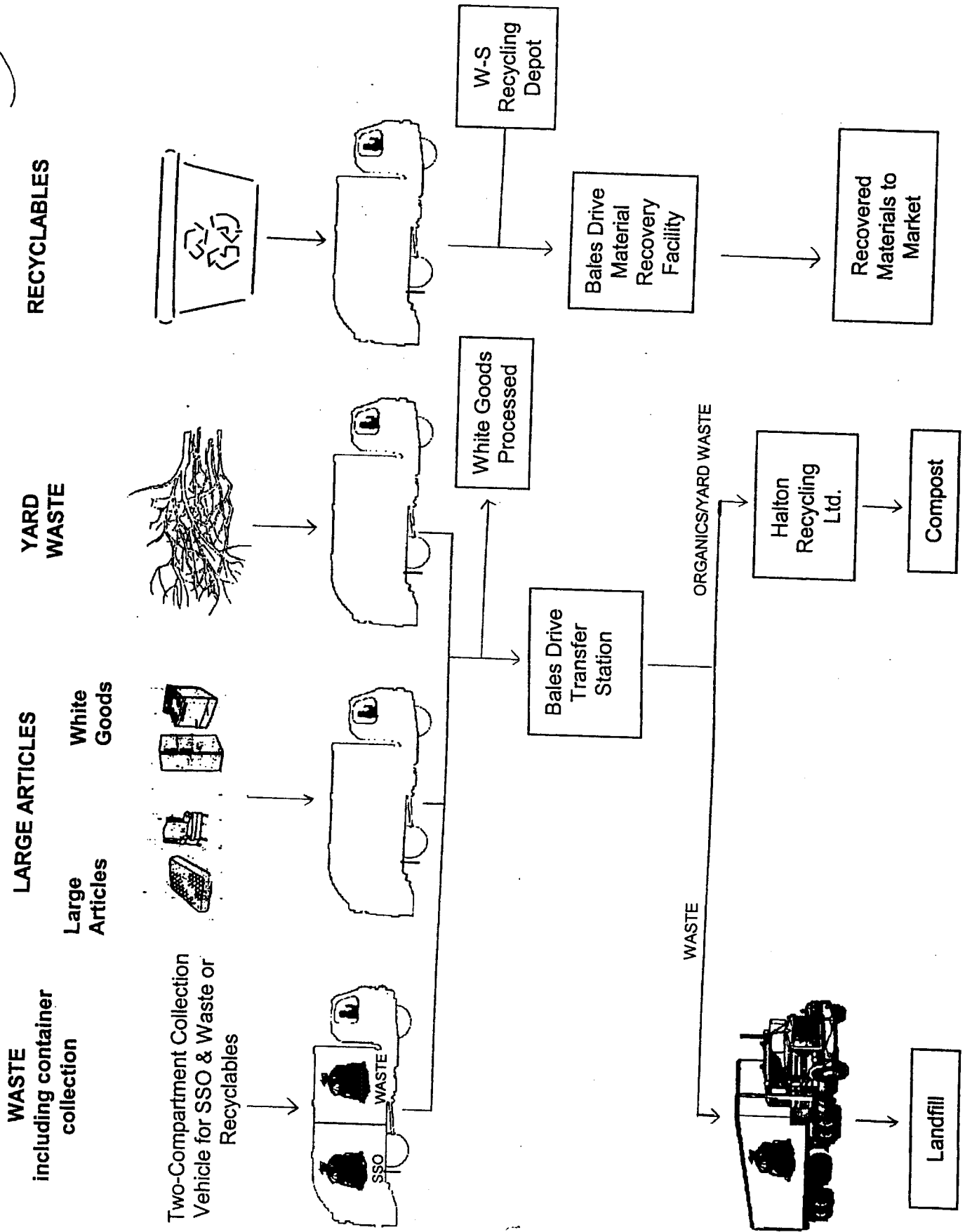
(71)

PRESENT WASTE COLLECTION, PROCESSING AND DISPOSAL SYSTEM



PROPOSED WASTE COLLECTION, PROCESSING AND DISPOSAL SYSTEM

(B)



CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF MAY 25, 2004

Item 1, Report No. 45, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on May 25, 2004.

1

PRESENTATION ON THE 3 STREAM WASTE COLLECTION PROGRAM

(Referred from the Committee of the Whole (Working Session), Meeting of April 27, 2004)

The Committee of the Whole (Working Session) recommends:

- 1) **That the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated April 27, 2004, be approved; and**
- 2) **That the presentation of Mr. Andrew Campbell, Director of Solid Waste Management, Transportation and Works Department, The Regional Municipality of York, 17250 Yonge Street, Newmarket, L3Y 6Z1, be received.**

The Committee of the Whole (Working Session), at its meeting of April 27, 2004, recommended:

- 1) That this matter be referred to the Committee of the Whole (Working Session) meeting of May 11, 2004 and that the Region of York be requested to make a presentation;
- 2) That the memorandum from the Commissioner of Engineering and Public Works, dated April 27, 2004, be referred to the Committee of the Whole meeting of May 3, 2004; and
- 3) That the presentation material, be received.

Report of the Commissioner of Engineering and Public Works with respect to the above dated April 27, 2004

Recommendation

The Commissioner of Engineering and Public Works recommends:

- 1) That the presentation of staff be received;
- 2) That any comments or recommendations arising from the presentation be forwarded to the Regional Municipality of York (the Region) for their consideration in the design and implementation of the 3 stream waste processing program and/or facilities;
- 3) That the City plan to implement a 3 stream collection program no sooner than July 2005, subject to:
 - a) confirmation from the Region that by July 2005, there is sufficient capacity at Halton Recycling Inc.'s Newmarket facility to handle Source Separated Organics from the City of Vaughan,
 - b) the Region's new Materials Recovery Facility on Bales Drive, to which fully commingled recycling materials can be delivered, being fully operational,
 - c) sufficient funding being approved to cover the additional administrative and collection costs of this new program, and,
 - d) new collection contracts being finalized and the necessary collection equipment being available to commence collection.

Purpose

To inform Council about the upcoming 3 stream waste collection program.

Background - Analysis and Options

As part of the Region's overall waste disposal and diversion plans, and to comply with the new provincial target of 60% waste diversion by 2008, a 3 stream waste collection and processing program is being introduced. Area municipalities are expected to be participating in this program by July 2005.

The presentation today by staff outlines further the 3 stream program, its impact on collection, and provides items for discussion concerning collection frequency and existing collection contracts.

Relationship to Vaughan Vision 2007

This report recommends a change from the priorities previously set by Council and the necessary resources have not been allocated.

Conclusion

Waste is a shared responsibility, with the Region responsible for waste processing and disposal, and the City responsible for collection. The City's collection programs must not only meet the needs of the residents, but also contribute towards the Province's overall goal of 60% waste diversion by 2008. The 3 stream program, and other initiatives, will help Vaughan achieve this goal.

Attachments

N/A

Report prepared by:

Brian T. Anthony, CRS-S, C. Tech