

TO:	CHAIR AND MEMBERS COMMUNITY AND NEIGHBOURHOODS COMMITTEE MEETING ON AUGUST 16, 2011
FROM:	JAY STANFORD, M.A; M.P.A. DIRECTOR, ENVIRONMENTAL PROGRAMS & SOLID WASTE
SUBJECT:	UPDATES ON GREEN BIN PROGRAM AND ZERO WASTE STRATEGIES

RECOMMENDATION

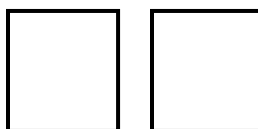
That, on the recommendation of the Director – Environmental Programs & Solid Waste, the following actions **BE TAKEN**:

- (a) All activities dealing with a Green Bin (collection and processing) Program **BE PLACED ON HOLD**, including the proposed pilot project, until March 2013 it being noted that the current and anticipated tax targets do not allow for new projects of this magnitude at this time;
- (b) Civic Administration **BE DIRECTED** to update the appropriate Standing Committee on developments that may alter the Green Bin Program costs such as advancements in the extended producer responsibility (EPR) program originally proposed by the Provincial Government or economic development opportunities as they come available; and
- (c) Civic Administration **BE DIRECTED** to focus existing resources on other elements from the Interim Business Plan for the Green Bin Program and Zero Waste Strategies (January, 2010) that relate to the optimization of existing programs such as the Blue Box Program, Yard Material and Leaf Collection and Processing, EnviroDepot and Outreach/Awareness programs as opposed to new initiatives.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Relevant reports that can be found at www.london.ca include:

- Update - Green Bin And Modified Garbage Collection Pilot Project (February 15, 2011 meeting of the Community and Neighborhood Committee (CNC), Agenda Item #13)
- Green Bin Processing for Pilot Project – Legal and Operational Requirements from Delaying Project (September 20, 2010 meeting of the Environment and Transportation Committee (ETC), Agenda Item #1)
- Green Bin Processing for Pilot Project (September 13, 2010 meeting of the ETC, Agenda Item #2)
- Update: Composting Facilities in Ontario and Impact on London’s Green Bin Pilot Project (July 19, 2010 meeting of ETC, Added Agenda Item #30)
- Update: Interim Business Plan for the Green Bin Program and Zero Waste Strategies (May 10, 2010 meeting of ETC, Agenda Item #13)
- Interim Business Plan for the Green Bin Program and Zero Waste Strategies (January 11, 2010 meeting of the ETC, Agenda Item #11)
- Guidance Document for Waste Diversion Decisions including the Green Bin Program (November 10, 2008 meeting of the ETC, Agenda Item #7)
- Waste Diversion Strategy Public Consultation Document and Recent Waste Diversion Initiatives – *Road Map to Maximize Waste Diversion in London* (December 10, 2007 meeting of ETC, Agenda Item # 9)



BACKGROUND

PURPOSE:

The purpose of this report is to seek approval to:

- place on hold all activities associated with Green Bin Program including the Green Bin Pilot Project until March 2013, and
- focus existing resources on other elements from the Interim Business Plan for the Green Bin Program and Zero Waste Strategies (January, 2010) that relate to the optimization of existing programs such as the Blue Box Program, Yard Material and Leaf Collection and Processing, EnviroDepot and Outreach/Awareness programs as opposed to new initiatives.

CONTEXT:

In January 2010, Council approved a Green Bin Program pilot project to begin in the fall 2010 as part of the Interim Business Plan for the Green Bin Program and Zero Waste Strategies. In the fall 2010, Council decided to delay implementation of the Green Bin Program pilot project by six months until the spring 2011 and requested additional information on processing options.

In the spring 2011, Council decided to delay implementation of the Green Bin Program pilot project a further six months until the fall 2011 and directed staff to:

- implement a garbage cart pilot project,
- conduct further research on resource recovery technologies and home composting, and
- investigate and report back on neighbourhood concerns and the Ministry of the Environment (MOE) progress related to the remaining operating challenges at the Orgaworld Canada Ltd. composting facility.

DISCUSSION:

Addressing Council’s Recommendations

Item	Status
Garbage cart pilot project	Currently under way. Started with 100 homes, north of Fanshawe Park Road in B Zone.
Research on resource recovery technologies, home composting	Under way
Neighbourhood concerns and the Ministry of the Environment progress related to the remaining operating challenges at the Orgaworld Canada Ltd. composting facility.	City staff will be attending the next Zero Odours Advisory Group (ZOAG) meeting in early September. At that meeting updates will be received by Orgaworld and the MOE

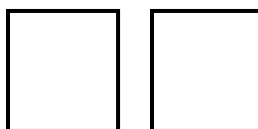
Next Steps for the Green Bin Program

It is recommended that the Green Bin Program including the pilot project be delayed a further 18 months primarily because of financial constraints facing the City, and to focus staff and financial resources on Zero Waste Strategies that optimize existing programs. These items are discussed in further detail below, highlighted on Table 1 (next page) and with additional detail in Appendix A.

a) Financial Constraints

The Green Bin program (including weekly recycling collection and seasonal garbage collection) will increase operating costs by approximately \$5,500,000 per year and require a one time capital investment of \$7,600,000. The increased operating cost per household for full rollout is approximately \$35 per household per year (in 2011 dollars). The current and anticipated tax targets do not allow for new projects of this magnitude without substantial additional outside funding.

It was previously thought that Extended Producer Responsibility (EPR) initiatives being proposed by the MOE had the potential to significantly decrease the amount of new funding required to pay for the Green Bin program. Potentially about 50% of the annual operating cost of a Green Bin program could be covered if full EPR for recycling was introduced. Industry currently pays



between 40% and 50% of the cost the Blue Box program. There is currently no timetable proposed for the implementation of full EFR for recycling.

b) Changing Technology

Staff are currently reviewing resource recovery facilities and strategies including aerobic composting, anaerobic digestion, mechanical biological treatment (MBT) processes, advanced thermal treatment (ATT) and other technologies (including new, next generation and emerging technologies) to assist in optimizing materials recovery and moving from the current diversion rate of 40% towards the Provincial goal of 60%.

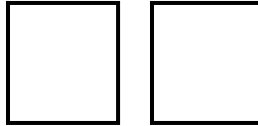
It would be prudent to complete this review of alternative technologies prior to beginning the Green Bin Program pilot project and advancing further thinking on only one resource recovery technology.

c) Need to Optimize Zero Waste Strategies

In January 2010, Council adopted the Interim Business Plan for the Green Bin Program and Zero Waste Strategies. The Interim Business Plan for Zero Waste Strategies included a number of initiatives to enhance or optimize the existing recycling, yard material and depot programs. Detailed information on the individual initiatives is required to be provided to Council for final approval prior to implementation. Information on the status of each of these initiatives as well as other initiatives requested by Council is provided in Appendix A. As of August 2011, 12 Zero Waste strategies have either been completed or are in progress (Table 1).

Table 1 – Update on Interim Business Plan for Green Bin Program & Zero Waste Strategies

Initiative	Details
<i>Initiatives Fully Implemented</i>	
Add Depot materials	<ul style="list-style-type: none"> • Electronics • Fluorescent tubes/bulbs, propane tanks, batteries • Blue Box recycling at W12A Landfill
Yard Material Collection	<ul style="list-style-type: none"> • Eliminate plastic bags
HSW Depot	<ul style="list-style-type: none"> • Provide service to small business • Expand hours
<i>Initiatives in Progress</i>	
Increase Blue Box container capacity	<ul style="list-style-type: none"> • Over 1,000 of 2,200 additional carts delivered to multi-residential buildings; • Three month roll-out of reusable recycling bags to 20,000 units in multi-residential buildings; • Six week roll-out of new large capacity blue boxes to 117,000 curbside households
Add materials to curbside/ multi- residential collection	<ul style="list-style-type: none"> • Thermoform PET (i.e., plastic clamshell containers) • Aerosols • Cardboard cans (e.g., frozen juice cans) • #3, #6 & #7 plastic bottles, tubs and jugs
Add Depot materials	<ul style="list-style-type: none"> • Freon appliances
Enhanced Promotion/Awareness	<ul style="list-style-type: none"> • Multi-residential promotion campaign underway
<i>Initiatives in Planning Stage</i>	
EnviroDepot upgrades	<ul style="list-style-type: none"> • North End depot • Clarke Road depot • Additional materials (e.g., paint, antifreeze, etc.)
Enhanced Promotion/Awareness	<ul style="list-style-type: none"> • Campaigns being developed for 1) proper set out at curb, 2) new materials being collected and 3) materials with low capture rates.
<i>Initiatives Being Explored/Under Consideration by Staff</i>	
Recycling/garbage/yard material collection frequency	<ul style="list-style-type: none"> • Examination of weekly recycling collection and seasonal garbage collection plus other strategies
Reduce garbage container limits	<ul style="list-style-type: none"> • Review impact of new recycling initiatives
User fees	<ul style="list-style-type: none"> • Fees for bulky items or extra garbage



Initiative	Details
<i>New Initiatives to add to Interim Business Plan</i>	
Maximize opportunities at new MRF	<ul style="list-style-type: none"> • Lower costs through regional partners • Coordination of regional promotion
Garbage Cart Pilot	<ul style="list-style-type: none"> • Requested by Council spring 2011
Review of Resource Recovery Facilities and Strategies	<ul style="list-style-type: none"> • Requested by Council spring 2011
Home Composting Review	<ul style="list-style-type: none"> • Requested by Council spring 2011

Staff resources are stretched to the limit given the number of waste diversion initiatives currently underway or that need to be examined. Delaying the Green Bin Program pilot project will allow staff time to focus more on optimization projects remaining on the Table 1.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Anne Boyd, Waste Diversion Coordinator and Mike Losee, Manager – Solid Waste Engineering.

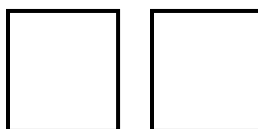
PREPARED BY:	
WESLEY ABBOTT, P. ENG. DIVISION MANAGER SOLID WASTE MANAGEMENT	
PREPARED AND RECOMMENDED BY:	REVIEWED & CONCURRED BY:
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENTAL PROGRAMS & SOLID WASTE MANAGEMENT	PAT McNALLY, P. ENG. EXECUTIVE DIRECTOR, PLANNING, ENVIRONMENTAL AND ENGINEERING SERVICES

July 28, 2011

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Appendix A - Update on Interim Business Plan for Green Bin Program & Zero Waste Strategies

c. John Braam, P. Eng., Director of Water & City Engineer



Appendix A Update on Interim Business Plan for Green Bin Program and Zero Waste Strategies

Abbreviations used on Table A-1:

- CIF Continuous Improvement Fund
- EPR Extended Producer Responsibility
- MHSW Municipal Hazardous & Special Waste
- MOE Ministry of the Environment (Provincial)
- MRF Material Recovery Facility
- SSO Source separated organics
- WDO Waste Diversion Ontario

Table A - 1
Update on Interim Business Plan for Green Bin Program and Zero Waste Strategies

Interim Business Plan – January, 2010			Update as of August 1, 2011
Program	Program Change	Proposed Date	
Curbside Programs			
Green Bin Program	<ul style="list-style-type: none"> - Weekly collection of Green Bin and Blue Box - Food waste & soiled paper/tissues - Can top up bin with yard materials - Collection in a rollout cart (50 litre, 85 litre cart or 120 litre) - Liners must be certified compostable - Seasonal Garbage: Weekly collection of garbage from April 1 to September 30; every two week pickup from November 1 to March 31. 	<ul style="list-style-type: none"> - 3 year phase beginning with pilot (Spring 2010) 	<ul style="list-style-type: none"> <i>Green Bin Pilot</i> - Recommend delay of Pilot Project and related activities until March 2013 <i>Backyard Composting Pilot</i> - Phase one completed - Phase two underway <i>Green Bin Processing; New, Emerging Next Generation Technologies</i> - Ongoing <i>Seasonal Garbage Collection</i> - Research ongoing
Recycling Program	<ul style="list-style-type: none"> - Provide Blue Boxes at no cost 	<ul style="list-style-type: none"> - Spring 2011 	<ul style="list-style-type: none"> - Blue Box distribution to begin mid-August 2011 - Granted 50% funding of new Blue Boxes and distribution from CIF
	<ul style="list-style-type: none"> - Add aerosols containers 	<ul style="list-style-type: none"> - Spring 2011 	<ul style="list-style-type: none"> - Accepted with start-up of new MRF, August 2, 2011 - Promotion to be included with new Blue Box delivery
	<ul style="list-style-type: none"> - <i>New</i> - Add cardboard cans (i.e. 'spiral wound' containers) 		<ul style="list-style-type: none"> - Accepted with start-up of new MRF, August 2, 2011 - Promotion to be included with new Blue Box delivery
	<ul style="list-style-type: none"> - Add remaining plastic bottles, tubs, jugs and clamshells (including other thermoformed #1 plastic) 	<ul style="list-style-type: none"> - 2011 to 2013 	<ul style="list-style-type: none"> - Accepted with start-up of new MRF, August 2, 2011 - Promotion to be included with new Blue Box delivery
	<ul style="list-style-type: none"> - Weekly collection 	<ul style="list-style-type: none"> - Fall 2011 	<ul style="list-style-type: none"> - Will be part of future budget discussions - Frequency of recycling collection traditionally matches garbage collection

(table continued)

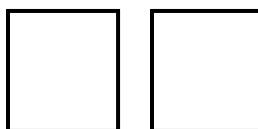


Table A - 1
Update on Interim Business Plan for Green Bin Program and Zero Waste Strategies

Interim Business Plan – January, 2010			Update as of August 1, 2011
Program	Program Change	Proposed Date	
Garbage Collection	- Add fluorescent tubes, electronics (including TVs/ monitors) to list of non-collectables	- Spring 2010	- Completed summer 2010 - Implement interim collection arrangements until September 30, 2010
	- Stop curbside collection of fluorescent tubes, electronics (including TVs/ monitors)	- October 2010	- Completed October 2010
	- Switch to seasonal garbage collection; weekly collection of garbage during summer and bi-weekly collection of garbage during winter (decision to be made if 50% or 100% of the City)	- Fall 2011	- Report to Council Fall, 2011 - Will be part of future budget discussions
	- New – Garbage cart pilot	-	- Requested by Council spring 2011 - Underway with 100 homes in Zone B
Yard Materials (including fall leaves)	- Eliminate the use of non-compostable plastic bags	- January 2010	- Implemented 2010
	- Collection every 5 weeks during spring & summer - Collection every 3 weeks during fall	- Spring 2012	- Report to Council Fall, 2011 - Will be part of future budget discussions
Multi-Residential Programs			
Green Bin Program	- Food waste & soiled paper/tissues	- Defer decision until curbside Green Bin is fully implemented	- Recommend delay of Pilot Project and related activities until March 2013 - Continue reviewing implementation of programs in Waterloo, Hamilton, Ottawa, etc.
Recycling Program	- Increase capacity by providing recycling carts and bins at subsidized cost	- Spring 2010	- In progress, 1,100 of 2,200 roll out carts have been sold - Pilot project underway with subsidized large (4 yd ³) bins for cardboard
	- New - Increase capacity by providing reusable blue bags		- Three month roll out of reusable bags to 20,000 multi-residential units
	- Add aerosols containers	- Spring 2011	- Accepted with start-up of new MRF, August 2, 2011 - Promotion started
	- New - Add cardboard cans (i.e. 'spiral wound' containers)		- Accepted with start-up of new MRF, August 2, 2011 - Promotion started
	- Add remaining plastic bottles, tubs, jugs and clamshells (including other thermoformed #1 plastic)	- 2011 to 2013	- Accepted with start-up of new MRF, August 2, 2011 - Promotion started
Garbage Collection	- Increase fees for 2 nd weekly garbage collection	- March 2010	- Implemented

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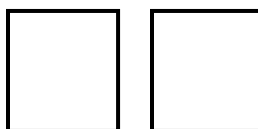
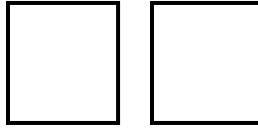


Table A - 1
Update on Interim Business Plan for Green Bin Program and Zero Waste Strategies

Interim Business Plan – January, 2010			Update as of August 1, 2011
Program	Program Change	Proposed Date	
Community EnviroDepots			
W12A Landfill Small Vehicle Drop-off	- Add yard materials, Blue Box recyclables, TVs and monitors	- Summer 2010	- Implemented summer 2010
	- <i>New</i> - Add Freon appliances	-	- Program launch scheduled for September 2011
W12A Landfill HSW Depot	- Open facility to small quantity (e.g., business) generators	- Summer 2010	- Implemented Fall 2010
	- <i>New</i> - Expand facility hours	-	- Implemented Fall 2010 - Expanded from 4 days per week to 5 days per week
Oxford Street and Clarke Road EnviroDepots	- Add fluorescent tubes and bulbs, TVs and monitors for collection	- Spring 2010	- Implemented spring 2010
	- <i>New</i> - Add Freon appliances	-	- Program launch scheduled for September 2011
	- Establish building for collection of select MHSW materials (including unwanted paint), electronics and reuse centre (e.g., Goodwill) - Building may not be necessary if industry provides service	- Summer 2011	- Part of EPR discussions with industry on MHSW; discussion on hold will new EPR arrangements for MHSW finalized - Discussions underway with Habitat for Humanity to establish reuse centre for building materials at Oxford
New EnviroDepot at Adelaide Works Yard	- New EnviroDepot to handle same materials as existing depots except for brush	- Fall 2011	- Preliminary design work suggests Adelaide Works Yard may not be a suitable location - Strong (and growing) need for facility exists - Alternative locations being investigated
	- Establish building for collection of full range of MHSW materials, electronics and reuse centre (e.g., Goodwill) - Building may not be necessary if industry provides service	- Fall 2011	- Part of EPR discussions with industry on MHSW; discussion on hold will new EPR arrangements for MHSW finalized
Waste Reduction and Education/Awareness Programs			
User Fees	- Provide residents an opportunity to buy tags for containers in excess of container limits	- Fall 2010	- Research on-going - To be addressed in CNC report in the future
	- Fee for bulky items	- Fall 2011	- Research on-going - To be addressed in CNC report in the future

(table continued)



**Table A - 1
Update on Interim Business Plan for Green Bin Program and Zero Waste Strategies**

Interim Business Plan – January, 2010			Update as of August 1, 2011
Program	Program Change	Proposed Date	
Enhanced Education and Awareness Program	<ul style="list-style-type: none"> - New education and awareness programs to encourage wiser purchasing practices, minimize environmental (ecological) impacts and secondary resources conservations - Additional education and awareness programs required to inform residents of new programs and to increase participation and/or capture rate in existing programs 	<ul style="list-style-type: none"> - Phased in over two years beginning Spring 2011 	<ul style="list-style-type: none"> - Enhanced education and awareness program underway for new Boxes and new materials underway; program to include printed material, radio, social media, etc. - Enhanced education and awareness program underway for multi-residential buildings; program includes promotional material, lobby displays and education of superintendents - Enhanced education and awareness program being developed for materials with low capture rates - Additional education and awareness programs to be part of future budget discussions
Reduce Container Limits	<ul style="list-style-type: none"> - Reduction of container limit to 3 containers for weekly collection and 6 containers for bi-weekly collection 	<ul style="list-style-type: none"> - Fall 2011 	<ul style="list-style-type: none"> - Research underway including curbside monitoring (complete) and impact of new recyclable materials - To be addressed in CNC report in the future
	<ul style="list-style-type: none"> - Reduction of container limit to 2 containers for weekly collection and 4 containers for bi-weekly collection 	<ul style="list-style-type: none"> - Defer decision until curbside Green Bin is fully implemented 	<ul style="list-style-type: none"> - Further review in 2011 and 2012 - To be addressed in CNC report in the future
Other Initiatives	<ul style="list-style-type: none"> - Mandatory recycling or composting by-laws, clear bags for garbage, “garage sale” at the curb, etc. 	<ul style="list-style-type: none"> - Defer decisions until curbside Green Bin is fully implemented 	<ul style="list-style-type: none"> - Further review in 2011 and 2012 - To be addressed in CNC report in the future