

<b>TO:</b>	<b>CHAIR AND MEMBERS COMMUNITY AND NEIGHBOURHOODS COMMITTEE MEETING ON SEPTEMBER 13, 2011</b>
<b>FROM:</b>	<b>JAY STANFORD, M.A; M.P.A. DIRECTOR, ENVIRONMENTAL PROGRAMS &amp; SOLID WASTE</b>
<b>SUBJECT:</b>	<b>UPDATES ON GREEN BIN PILOT PROJECT</b>

**RECOMMENDATION**

That, on the recommendation of the Director – Environmental Programs & Solid Waste, this report **BE RECEIVED** for information purposes.

**PREVIOUS REPORTS PERTINENT TO THIS MATTER**

Relevant reports that can be found at [www.london.ca](http://www.london.ca) include:

- Updates on Green Bin Program and Zero Waste Strategies (August 16, 2011 meeting of the Community and Neighborhood Committee (CNC), Agenda Item #19)
- Update - Green Bin and Modified Garbage Collection Pilot Project (February 15, 2011 meeting of 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)

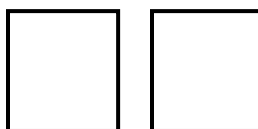
**BACKGROUND**

**PURPOSE:**

The purpose of this report is to provide Committee and Council with an overview and update on the upcoming Green Bin Pilot Project and information on the Orgaworld Canada Ltd. composting facility. Some of the information in this report has previously been provided but is presented again in order to provide a more comprehensive update.

**CONTEXT:**

In January 2010, Council adopted the *Interim Business Plan for the Green Bin Program and Zero Waste Strategies* which included a Green Bin Pilot Project to begin in the fall 2010 as a Service Growth item in the 2010 budget process. The budget for the pilot project was approved on March 3, 2010. In the fall 2010, Council decided to delay implementation of the Green Bin Pilot Project by six months until the spring 2011 and requested additional information on processing options.



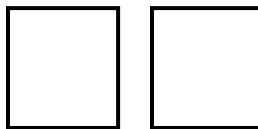
In spring 2011, Council decided to delay implementation of the Green Bin Pilot Project a further six months until the fall 2011 and directed staff to:

- implement a garbage cart pilot project (underway),
- conduct further research on resource recovery technologies and home composting (underway), 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 (discussed in this report).

**DISCUSSION:**

**Overview of Green Bin Pilot Project**

Component	Comment
Delivery of Carts and Kitchen Catchers	Monday, October 3 to Friday October 7
First Collection	Thursday, October 13
Collection Area	Location - See Appendix A Number of Homes - 762
Collection Frequency	Recycling – Weekly (52 pickups per year) Green Bin – Weekly (52 pickups per year) Garbage - Summer (April to September), Weekly (26 pickups per year) - Winter (October to March), Weekly (13 pickups per year)
Cart Selection	Residents can choose from a 45 litre, 80 litre or 120 litre cart based on their needs and room to store the cart. To date approximately half of the residents had requested a specific cart size as follows: <ul style="list-style-type: none"> <li>• 45 litre – 150 (40%)</li> <li>• 80 litre – 186 (50%)</li> <li>• 120 litre – 41 (10%)</li> </ul>
Kitchen Catcher Selection	Residents can choose from three types of kitchen catcher based on their needs. To date approximately half the residents had requested a specific kitchen catcher as follows: <ul style="list-style-type: none"> <li>• Orbis (standard) – 115 (30%)</li> <li>• Surclose (air holes) 217 (60%)</li> <li>• Busch (small) – 45 (10%)</li> </ul>
Liners	Paper liners or certified compostable liners are allowed. Plastic bags are not allowed as liners.
Materials Collected	Materials collected include: <ul style="list-style-type: none"> <li>• Food waste</li> <li>• Paper products that cannot go in the Blue Box (e.g., paper towels and napkins, other soiled paper)</li> <li>• Animal bedding</li> <li>• Can be topped up with yard materials</li> </ul>
Materials Not Collected	Materials not collected include but are not limited to: <ul style="list-style-type: none"> <li>• Diapers and sanitary products</li> <li>• Kitty litter and pet waste</li> </ul>
Educational Material	All residents will be provided with a: <ul style="list-style-type: none"> <li>• Booklet detailing the project</li> <li>• Fridge magnet showing the materials accepted in the Green Bin Pilot Project</li> <li>• Waste Reduction &amp; Conservation Calendar for the pilot area</li> </ul>



### **Pilot Project Study Area**

The pilot area selected is shown in Appendix A. Several areas in the City were evaluated to determine which would be most appropriate for the pilot. The area shown in Appendix A was found to be most suitable. This area satisfied the selection criteria which included a mix of housing types, including row housing and homes with and without garages, a range of property and lot sizes, and 'depot' style collection (i.e., townhome complexes that set out materials on a common pad, rather than in front of each home).

The baseline data has been collected for this area including the collection of information that will allow for analysis of pilot project impact on waste diversion and estimated project delivery costs. For example, a garbage truck route was re-configured to align with the pilot area to allow for more detailed collection of garbage weights for comparison purposes with data after Green Bin material is being collected from the area.

Residents in the study area have the option not to participate in the Green Bin Pilot Project.

### **Pilot Project Evaluation Plan**

The Green Bin Pilot Project will be conducted to ensure that both qualitative and quantitative data is obtained and reported back to Council. Some of these measures will be augmented by data from other municipalities. Some of the data noted below is already being collected and would be used as baseline data. Findings from the Green Bin Pilot Project will assist Committee and Council members in their decision about a city-wide program to maximize waste diversion.

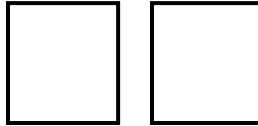
The Green Bin Pilot Project will also be used to test a "modified" garbage collection schedule. The modified garbage collection schedule consists of weekly garbage collection during the summer (generally April to September) and bi-weekly collection during the winter (generally October to March). Testing the modified collection schedule will help determine public acceptance and what the cost savings/increases are with this type of collection schedule.

The evaluation of the Green Bin Pilot Project will include the following measures:

- Project evaluation survey: residents will be surveyed to provide feedback to assess their overall satisfaction and opinions with using the Green Bin and participating in the modified garbage collection program.
- Resident participation: curbside monitoring will indicate the frequency of Green Bin use.
- Diversion of Green Bin organics: kilograms per household will be measured each week and tracked. This will be compared against previous estimates of expected diversion from a Green Bin program and implications for total diversion of a City-wide program.
- Overall diversion: total kilograms per household diverted including other diversion programs (i.e., curbside Blue Box recycling, leaf & yard collection), compared with London averages, both before and after the Pilot Project implementation.
- Cost per household and cost per tonne: estimated costs will be reported and compared against the current program costs and where comparable, costs in other municipalities.

In addition to the data above, a Pilot Project will also provide information to help decide about best practices associated with a range of items including:

- Evaluation of truck, lifter and Green Bins. For example, there is a range of truck configurations for Green Bin collection and data from the Pilot Project will be supplemented from municipalities using alternatives.
- Collection issues of different housing types.
- Impact on collection: time per stop, work flow, and impact on workers will be reviewed and compared with current system averages.



**Composting Facility**

Orgaworld Canada Limited (“Orgaworld”) was previously selected as the preferred location for composting of the material collected from the Green Bin Pilot Project in February 2011. They were the low bidder (\$91 per tonne), achieved the highest overall ranking when evaluated against predetermined criteria and met all the terms and conditions of the City’s Request for Proposal. The annual cost is expected to range from \$12,000 to \$15,000 depending on the quantities of Green Bin materials collected.

The composting process by its very nature generates odours. The extent of odour generation can be managed through proper processing of source separated organics (SSO) and through proper operation of odour abatement infrastructure at composting facilities.

It was previously reported to Council there had been on-going historical neighbourhood concerns about odours and Orgaworld had undertaken a significant facility upgrade in the fall of 2010 and the spring of 2011 to reduce odours. It was noted at the time that the upgrades appear to have reduced the odour issues over the winter but had not been through a summer period when controlling odours can be more challenging.

In discussion with Ministry of the Environment staff, this summer there has been a significant improvement in odour issues from Orgaworld compared to previous summers. There are still occasional odours coming from the facility and these odours continue to be a concern and source of frustration in the community. Orgaworld continues to have its citizen group called the Zero Odour Advisory Group (ZOAG). City staff have been listed as an observer at these meetings. This may change now that the City is a customer of this facility. Orgaworld in recent months has been processing between 2,000 and 2,400 tonnes of Green Bin materials per week. The City will be adding about between 2 and 3 tonnes per week of Green Bin materials noting that there will be times of the year when it could be higher or lower than this average range.

**ACKNOWLEDGEMENTS**

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

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### Appendix A Pilot Study Area

