



## **Request for City Council Committee Action Department of Public Works**

**Date** November 17, 2009

**To:** Honorable Sandra Colvin Roy, Chair, Transportation & Public Works Committee

**Subject:** **Interim Report on Source Separated Organics (SSO) pilot collection programs.**

**Recommendation:**  
Receive and File

**Prepared by:** Susan Young, Division of Solid Waste and Recycling 673-2443

**Approved by:**  

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Steven A. Kotke, City Engineer, Director of Public Works

**Presenter:** Susan Young

**Financial Impact**  
No financial impact

### **Background/Supporting Information**

Waste reduction has become a State and County priority in efforts to reduce land filling of wastes and to reduce the carbon footprint of waste management activities. Both entities have focused on the separate collection and composting of Source Separated Organics (SSO) as their primary strategy for waste reduction in the residential and commercial waste sectors. Source Separated Organic (SSO) materials comprise that portion of the residential trash stream that can be composted in a commercial (not back yard) composting facility. The materials include food scraps (both vegetable and animal), non-recyclable or limited-recyclable paper products (pizza boxes, paper towels, boxes such as frozen food containers, shredded office paper), vacuum cleaner bags and their contents, and other organic wastes. Hennepin County, the State of Minnesota and environmental activists have pushed for collection and composting of these wastes, separate from other residential wastes, for several years. It would be advantageous for Minneapolis, because of its size and unique demographics, to conduct pilot programs that will help inform future regulatory efforts and ensure that Minneapolis will be able to design programs that are cost-effective and advantageous for the City.

The Linden Hills Neighborhood, Linden Hills Power and Light, and Hennepin County approached the City in 2006 to conduct a residential Source Separated Organics pilot program in the Linden Hills neighborhood. The City obtained a grant from Hennepin County to fund a portion of this pilot program. The pilot program began in September of 2008 after extensive planning efforts between the City, the County and Linden Hills Power and Light. The goals of this pilot program included:

- determination of participation levels in a highly motivated neighborhood with an environmentally aware demographic
- testing of a “opt-in” system of participation in the organics program
- determination of efficacy of mailings, neighborhood events and “block captains” in recruiting participants and informing the neighborhood about the program
- preliminary organics route design and crew workload information
- evaluation of the performance of the organics cart manufactured by Schaeffer Industries with particular attention to cart predation by rodents and raccoons.

The East Calhoun (ECCO) neighborhood requested participation in the SSO pilot program. Because the ECCO neighborhood demographics are very similar to the Linden Hills demographics, this presented an opportunity to test the efficacy of the Linden Hills Block Captain efforts against mailings and less intensive neighborhood information efforts. The results, below, show a higher percentage of signups with the Linden Hills model, but more participative residents in ECCO.

The SSO pilot programs were designed as “opt-in” programs; participants had to affirmatively sign up for the program to receive a cart and participate in the program. The Minneapolis pilot policy of an “opt-in” program has saved the City considerable capital expenditures as opposed to an “opt-out” program, since carts were not purchased and delivered to persons not interested in participating in the program and carts did not have to be removed from non-participatory residents.

Neighborhood	Percent Residents in Pilot	Percent Set Out weekly	Number of residents that switched to small cart
Linden Hills	50% (1199 hh)	68%	264
ECCO	35% (197 hh)	72%	33

The cost of separate SSO collection, exclusive of capital costs, greatly exceeds the avoided cost of HERC disposal. The weekly costs (below) show that separate collection of SSO is almost eight times more expensive than inclusion of SSO with mixed garbage.

SSO Tonnage (weekly average)	Cost of SSO Operations	Cost of SSO Tipping (\$14/ton)	SSO Cost Per ton	Cost per ton if garbage had been tipped at HERC
5.57	\$1,642	\$77.98	\$308.80	\$40

Even setting aside the capital costs of the program, at the subsidized tipping fee that Hennepin charges for SSO, the pilot program has cost more to operate than is saved through the reduced tipping fee. Due to a subsidy from Hennepin County current disposal costs for SSO are \$14/ton. If the subsidy is not continued, and the City continues the SSO program, proposals for SSO composting made to the City in the past year were \$38/ton, comparable to HERC disposal. This would escalate the cost per ton of the SSO program to \$332.80. The capital cost of carts for a city-wide program is projected between \$2,800,000 and \$3,600,000 and is not included in the cost per ton, nor is the cost of additional route trucks. The operating cost (less tipping fee) of a separately collected SSO program, city wide, is projected to be approximately \$4,000,000 per year.

For an SSO program to be cost-effective throughout the City, efficiencies must be found. These may include co-collection of SSO with yard wastes, development of more composting capacity for co-collected SSO and yard wastes that could reduce tipping fees and increase collection

efficiencies, finding SSO route efficiencies such as more houses per route-day or a closer transfer station than Brooklyn Park, or a combination of alternatives.

It has been planned to conduct pilots programs on the “City-collected” areas; these pilot programs will be initiated as soon as carts ordered some months ago arrive in the City. These pilots will not be aligned with neighborhoods, but with garbage routes. This will allow better analysis of route and costs data and at least some correlation with recycling data. It is hoped that these pilots, after an initial baseline SSO-only period, can be expanded to co-collect SSO and yard wastes in the spring. This co-collection would provide the most cost-effective collection program, and, depending on the availability and cost of co-composting services, may provide a more cost-effective overall organic materials management program. We anticipate continuing the pilot programs until they are eventually rolled into a citywide SSO collection program.