



Residential Source Separated Organics Collection Tool Kit

Developed by Georgia, Department of Community Affairs
and Georgia Recycling Coalition
Funded by EPA Region 4

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Residential Source Separated Organics Collection Tool Kit

Georgia Department of Community Affairs and
Georgia Recycling Coalition

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Section 1 Introduction

In 2009, more than 90 cities in the United States offered separate curbside collection for source separated organics (SSO) from residents (*U.S. Residential Food Waste Collection and Composting*, BioCycle, December 2009). The number of communities with SSO curbside programs was over double that reported in 2007. However, few of these communities are located in the southeast. In an effort to increase diversion of organics in the southeast, EPA Region 4 provide a grant to the Georgia Department of Community Affairs, administered by the Georgia Recycling Coalition, to provide guidance and tools for local governments to evaluate the feasibility of residential curbside collection of SSO.

The primary tool developed under this grant include an Excel[®] based Residential SSO Collection Performance Model to estimate the diversion, operational, and cost impact of implementing a residential SSO collection program in their community. This Tool Kit includes the following items that accompany the Residential SSO Collection Performance Model to offer local governments a full complement of resources to evaluate and, if deemed feasible, to implement, a SSO collection program in their community.

- Section 2: A User Guide (also embedded in the Residential SSO Collection Performance Model) to assist local governments with using the tool.
- Section 3: A summary of residential SSO collection programs across the United States (also embedded in the Residential SSO Collection Performance Model).
- Section 4: The Residential SSO Collection Performance Model results for three sample communities.
- Section 5: Sample implementation plan for a residential SSO curbside program.
- Section 6: Model Request for Proposals for SSO collection services.
- Section 7: Example of ordinance language requiring SSO collection or set-outs.
- Section 8: Sample customer surveys for a residential SSO curbside program.
- Section 9: Sample fact sheets and public information documents for a residential SSO curbside program.
- Section 10: Sample reporting documents for a residential SSO curbside program.
- Section 11: Containers and vehicles for residential SSO collection in the southeast.
- Section 12: Links to information regarding organics processing facilities in EPA Region 4.
- Section 13: Waste composition studies from States in EPA Region 4.

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Section 2

Residential SSO Collection Performance Model User Guide

Residential Source Separated Organics Collection Performance Model - User Guide

Developed for Georgia Department of Community Affairs and Georgia Recycling Coalition

Funded by EPA Region 4

Developed by SAIC Energy, Environment & Infrastructure, LLC

The Residential SSO Collection Performance Model contains both inputs (data to be entered by the user) and outputs (results calculated based on the inputs). **Users must enter assumptions for each input requested.** For many input cells, a drop-down menu with options is provided, and will appear when the user clicks on the green input cell. If a cell is highlighted red, an error has occurred and the user must modify the input. Inputs, outputs, and errors are identified as follows:

	Input
	Output
	Error

The following defined terms are used in the Residential SSO Collection Performance Model.

Corrugated Cardboard -- Old Corrugated Cardboard (OCC), Kraft paper, Kraft linerboard, containerboard cartons, and shipping boxes with corrugated paper medium (excludes wax or plastic-coated boxes). Includes Kraft paper bags.

Curbside program -- Residential SSO Collection Program where residents set-out materials at the curb for collection by a hauler.

Food Scraps -- is any food substance, raw or cooked, which is discarded, or intended or required to be discarded. Food wastes are the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods.

Magazine/Glossy -- magazines and catalogs printed on glossy, coated paper stock.

Mixed (Other Recyclable) Paper -- low-grade recyclable paper. Includes phone books, text books, other books and catalogs with ground wood paper, construction paper, junk mail, polycoated cartons and aseptic packages, blue prints and glossy, coated paper (except magazines and catalogs).

Newspaper -- printed and unprinted ground wood newsprint. Newspaper includes glossy paper inserts included with the newspaper.

Non-Recyclable Paper -- low-grade non-recyclable paper. Includes tissue paper, napkins, paper towels, paper plates, paper food cartons, cigarette packages, waxed paper, wax or plastic coated corrugated boxes, coated FAX paper, and carbon paper whether or not they are contaminated with fluids or food. Includes all other grades of paper if substantially contaminated with fluids or food scraps, including pizza boxes.

Other Organics -- organic materials, excluding diapers and textiles, not otherwise categorized, such as natural fibers, manure, cork, hemp rope, wicker products, saw dust, and lint.

Paperboard -- paperboard and boxboard such as that used for cereal and tissue boxes.

Source Separated Organics (SSO) -- includes the following materials separated by the generator from other municipal solid waste: yard trimmings; vegetative and non-vegetative food scraps; uncontaminated scrap wood; and compostable, non-recyclable paper.

Yard Trimmings -- grass clippings, leaves, garden trimmings, and brush up to 4 inches in diameter. Excludes yard trimmings generated from FEMA declared disasters.

Wood (Non-C&D) -- any painted or unpainted wood product not from construction, demolition, or renovation. Includes furniture, toys, pencils, chopsticks, and other miscellaneous items.

Please print this worksheet then select the following link.

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To return to Curbside Program Disposed Refuse Overview Worksheet, please select the following link.

[Return to Curbside Program Disposed Refuse Overview Worksheet](#)

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Section 3

Summary of Residential SSO Collection Programs

Section 3

	Hennepin Co, MN	Cedar Rapids, IA	City of San Mateo, CA	City of Boulder, CO	State College, PA	Olympia, WA	Cambridge, MA
General							
Curbside / Drop-off	Curbside	Curbside	Curbside	Curbside	Curbside	Curbside	Drop-off
Program Start Date	2003	1999	2011	2008	2010	2008	2008
Total Households	502,000	38,000	26,000	42,600	3,600	20,700	45,000
Households with Access	NA	38,000	26,000	42,600 ³	649	13,500	45,000
Participating Households	5,000	38,000 ¹	26,000	NA	480	6,800	500 ²
Participation Rate	NA	100.0%	100.0%	NA	74.0%	50.4%	1.1%
Materials Accepted							
Fruits/Vegetables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dairy	Yes	No	Yes	Yes	No ⁴	Yes	Yes
Meat	Yes	No	Yes	Yes	No ⁴	Yes	Yes
Yard Trimmings	No	Yes	Yes	Yes	No leaves and grass	Yes	No
Compostable Paper	Yes	No	Yes	Yes	Yes	Yes	Yes
Compostable Cups and Utensils	Yes	No	Yes	Yes	Yes (excludes cutlery)	NA	No
Compostable Bags	Yes	No	Yes	Yes	Yes	NA	NA
Other	Waxed OCC, polycoated paper cartons	Plain paper plates, napkins & paper towels, dryer lint	Waxed OCC	Waxed OCC	NA	Waxed OCC, polycoated paper cartons	
Equipment							

Summary of Residential SSO Collection Programs

	Hennepin Co, MN	Cedar Rapids, IA	City of San Mateo, CA	City of Boulder, CO	State College, PA	Olympia, WA	Cambridge, MA
Collection Vehicle	Fully and Semi-automated	Fully-automated	Fully-automated	NA	Semi-automated		NA
Number of Routes	NA	NA	6	NA	1	NA	NA
Size of Carts (gallons)	30-32 typically	96	96	32 minimum	35 with insert to reduce to 20	35-95	68
Cost per Cart	\$ 25.00	\$40.23	NA	NA	\$ 58.00	NA	NA
Kitchen Food Scrap Bins Provided?	No ⁵	No	Yes	No	Yes	No	No
Cost per Food Scrap Bin	NA	NA	\$3.00	NA	\$3.00	NA	NA
Collection Frequency, Quantity, and Fees Charged							
Collection Frequency	1x per week	1x per week	1x per week	Every other week	1x per week	Every other week	1x per week (2x in summer)
Tons Collected	3,500	14,000-16,000	NA	NA	93	NA	54
Fee per household per month	\$3.50-\$5.00	Included in Solid Waste Fee	Included in Solid Waste Fee	NA	NA	\$ 7.72	NA
Processing							
Technology	Aerated static pile	Windrows	Windrows		Windrows		Windrows and In-vessel
Fee per Ton	\$15.00	\$18.00	NA	NA	NA	NA	Included in Collection Cost
Revenues from Sale of Compost	NA	Free compost for residents	NA	NA	\$13/cy or \$3/bag bag (2 cy) =	NA	NA

Section 3

	Hennepin Co, MN	Cedar Rapids, IA	City of San Mateo, CA	City of Boulder, CO	State College, PA	Olympia, WA	Cambridge, MA
					\$69,644 in 2010		
Link to website	6	7	8	9	10	11	12

1. Residential SSO collection is included in the base service for Cedar Rapids, IA and San Mateo, CA.
2. The number of participating households for Cambridge, MA is based upon households that signed up for the program upon the start date; however, the program no longer requires households to sign up for the program.
3. Residential SSO collection is included in the base service for Boulder, CO. Households that sign up for the base service receive residential SSO collection.
4. The Residential SSO collection program for State College, PA is being amended to include dairy and meats to be accepted materials.
5. Kitchen food scrap bins were provided by Hennepin County, MN as part of the first pilot program. Food scrap bins are no longer provided as part of the program.
6. <http://hennepin.us/portal/site/HennepinUS/menuitem.b1ab75471750e40fa01dfb47ccf06498/?vgnnextoid=80105b40aabb4210VgnVCM10000049114689RCRD>
7. <http://www.cedar-rapids.org/resident-resources/utilities/solidwaste/yardwaste/Pages/default.aspx>
8. <http://www.ci.sanmateo.ca.us/index.aspx?nid=2076>
9. http://www.bouldercolorado.gov/index.php?option=com_content&view=article&id=2932&Itemid=930
10. <http://www.statecollegepa.us/index.aspx?nid=1322>
11. <http://olympiawa.gov/en/city-utilities/garbage-and-recycling/at-home.aspx>
12. <http://www.ci.cambridge.ma.us/theworks/ourservices/recyclingandtrash/faqrecyclingandrubbish/compostingquestions/organicsdropofffaq.aspx>

Section 4

Residential SSO Collection Performance Model Results for Sample Communities

This section presents results from the Residential SSO Collection Performance Model based on hypothetical residential SSO collection programs for Athens-Clarke County, City of Dublin and Laurens County, all located in the State of Georgia.

	Athens-Clarke County	City of Dublin	Laurens County
Total Households	9,800	5,500	15,868
Households with Access	9,800	4,584	15,868
Curbside vs. Drop-off	Curbside	Curbside	Drop-off
Vehicle	Rear Loader with Tippers	Rear Loader with Tippers	NA
Frequency	Every Week	Every Week	72 collections per year
Current Separate Yard Trimmings Collection	Yes	Yes	NA
Total Tons	1,800.0	2,156.9	NA
Total Tons by Households with Access	1,800.0	2,156.9	NA
Future Yard Trimmings Collection	Continued to be Collected Separately	Continued to be Collected Separately	NA
Total Tons	5,200.0	4,439.1	5,057.5
Total Tons by Households with Access	5,200.0	3,699.8	5,057.5

Section 4

	Athens-Clarke County	City of Dublin	Laurens County
Will Yard Trimmings disposed as Refuse be accepted by SSO collection Program?	Yes	Yes	NA
Materials to be targeted	Fruits, Vegetables and Bakery, Other Food Scraps, and Non-Recyclable Paper	Fruits, Vegetables and Bakery, Other Food Scraps, Non-Recyclable Paper and Other Organics	Fruits, Vegetables and Bakery, Other Food Scraps, Non-Recyclable Paper and Other Organics
Refuse Composition	Fruits, Vegetables and Bakery 7.5% Other Food Scraps 5.9% Non-Recyclable Paper 10.7% Yard Trimmings 2.1%	Fruits, Vegetables and Bakery 7.5% Other Food Scraps 5.9% Non-Recyclable Paper 5.4% Yard Trimmings 2.1% Other Organics 1.3%	Fruits, Vegetables and Bakery 7.5% Other Food Scraps 5.9% Non-Recyclable Paper 5.4% Yard Trimmings 2.1% Other Organics 1.3%
Participation Rate	69.0%	50.0%	NA
Capture Rate	Other Organics 50.0%	Other Organics 75.0%	Overall 25.0%
Collection Provider	Municipal Collection	Municipal Collection	Municipal Collection
Participating Households per Route	750	767	NA
Personnel	Driver – 1 (\$34,000) Collector – 2 (\$30,000)	Driver – 1 (\$34,000) Collector – 2 (\$30,000)	Driver – 1 (\$34,000)
Equipment	Vehicle – 1 (\$150,000, 0%, 10 years) Carts – 10,780 (\$55, 0%, 10 years)	Vehicle – 1 (\$185,000, 0%, 10 years) Carts – 5,042 (\$55, 0%, 10 years)	Dumpsters – 19 (\$500, 0%, 10 years)
O&M	\$20,000	\$20,000	\$0
Annual Fuel Costs	\$24,375	NA	\$19,200
Processing Costs	\$1,841 (102 tons at \$18.00 per unit cost)	\$2,310 (308 tons at \$7.50 per unit cost)	\$6,316 (842 tons at \$7.50 per unit cost)
Other Costs	\$0	\$0	\$0
Revenues and Savings	Disposal Costs \$4,295 (102 tons at \$42.00 per unit savings) Mulch Revenues NA	Disposal Costs \$10,549 (308 tons at \$34.00 per unit savings) Other Revenues NA	Disposal Costs \$28,630 (842 tons at \$34.00 per unit savings) Other Revenues \$280

Residential SSO Collection Performance Model Results for Sample Communities

	Athens-Clarke County	City of Dublin	Laurens County
Projected Disposed Refuse Collected by SSO collection Program	102 tons	308 tons	842 tons
Projected Disposed Yard Trimmings Collected by SSO collection Program	0 tons	0 tons	NA
Total Annual Costs	\$214,506	\$162,541	\$406,066
Total Annual Revenues/Savings	\$4,295	\$10,549	\$28,910
Monthly Cost per Household	\$1.79	\$2.30	\$0.29
Monthly Cost per Household with Access	\$1.79	\$2.76	\$0.29
Monthly Cost per Participating Household	\$2.59	\$5.53	NA

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Section 5

Sample Implementation Plan

Section 5

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Planning Phase	X	X	X	X	X	X	X	X	X											
Conduct waste characterization study, actual sort or desktop to estimate quantity of targeted organics disposed ¹																			City staff/ Consultant	\$30,000 for desktop study; \$200,000 for 2-season sort.
Conduct additional research (e.g., review collection and disposal data, audit routes to identify quantities, participation rates, size of setouts, etc.) ²																			City staff Private haulers, if applicable	No additional cost if City staff. Hauler may charge if not in contract.
Introduce potential program and seek approval of concept from senior management and elected officials ³																			City staff City leaders	No additional cost
Identify whether ordinance change required. If so, draft revision and begin submittal process																			City staff or legal counsel, City Council	No additional cost
Conduct a residential survey to assess likelihood of participation in SSO collection program and barriers to be addressed ⁴																			City staff/ Consultant	\$0 - \$45,000
Identify current or potential processing capacity for materials to be collected. ⁵																			City staff	No additional cost
If applicable, develop and issue RFP for compost/SSO processing services. Evaluate responses, ensure adequacy of capacity, etc.																			City staff	No additional cost

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
If private haulers collect yard trimmings, work with them to identify ability to accept SSOs, concerns, suggestions. If under contract, assess feasibility of renegotiating to take SSO																			City staff	No additional cost
If City crews collect yard trimmings, identify and evaluate operational changes and associated net costs, equipment needs, etc. to take SSO																			City staff	No additional cost
Develop a preliminary cost-benefit analysis of program ⁶																			City staff	No additional cost
Brief public officials about SSO options, cost and benefit estimates, and environmental benefits. Gather feedback																			City staff Public officials	No additional cost
Consider options for rolling out: conduct pilot study, phase in by region, start citywide?																			City staff	No additional cost
Order/purchase required carts and collection vehicles, bags, if applicable ⁷																			City staff	\$160,000 - \$180,000 per rear-load vehicle \$215,000 - \$240,000 per automated side load vehicle \$40 - \$60 per cart
Develop education and outreach plan and begin developing materials ⁸																			City staff	\$2 - \$4 per household for education and outreach

Section 5

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Review proposals and negotiate contract with organics processor(s), if private. If public processing, ensure facility is permitted and operationally prepared to handle SSO																			City staff Private processors, if applicable Processing facility staff, if applicable	Processing cost estimated at \$70 - \$80 per ton for windrow composting
Analyze collection bids and, if appropriate, negotiate contract with haulers to collect and deliver SSO to processing facility(ies) ⁹																			City staff Private haulers	Collection cost estimated at \$3.50 - \$7.50 per household per month.
Finalize phase-in approach ¹⁰																			City staff Haulers Processor(s)	No additional cost
Develop/update program information including web site ¹¹																			City solid waste, IT, communications staff, neighborhood associations media outlets	No additional cost, unless outsourced
If your program will include the use of specialized bags, work with manufacturers to design, manufacture the bags. Approve a sample well before program implementation																			City staff Bag manufacturer	No additional cost if residents pay for their own bags

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
If applicable, develop plan to distribute bags (door-to-door, retailers, City Hall, etc.)																			City staff Retailers	No additional cost
Pilot Program⁽¹²⁾										X	X	X								
Conduct education and outreach efforts in pilot program area																			City staff, media reps (as appropriate), neighborhood associations	Cost depends upon media outlets utilized
Train enforcement staff																			City staff	Additional cost if enforcement staff added
Distribute carts with education/outreach materials in pilot program area																			City staff and/or hauler(s)	No additional cost if done by City staff – may be additional cost if done by hauler or contractor
Implement pilot program																			City staff Hauler Processor	No additional cost
Audit pilot program routes ¹³																			City staff Hauler	No additional cost
Audit processing facility(ies) ¹⁴																			City staff Processor(s)	No additional cost
Survey pilot program households ¹⁵																			City staff	No additional cost
Citywide Implementation													X	X	X	X	X	X		

Section 5

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Revise program details and/or education and outreach materials based on results of pilot program																			City staff	Depends on outcome
Provide enforcement staff with enhanced training, if needed, based on pilot results																			City staff	Depends on outcome
If using private hauler(s) or processor(s), meet to discuss program refinements based on pilot results																			City staff Hauler(s) Processor(s)	No additional cost
Launch final education and outreach efforts																			City staff	Cost dependent upon education and outreach methods selected.
Distribute carts (with education and outreach materials)																			City staff Haulers, if in contract	No additional cost
Ensure bags are properly distributed at retail outlets, if applicable																			City staff Retailers	No additional cost
Implement program																			City staff Haulers Processor	No additional cost
Post-Implementation ¹⁶																		X		
Conduct collection audit																			City staff	No additional cost
Conduct processing audit																			City staff	No additional cost
Consider implementing post implementation survey																			City staff	No additional cost
Monitor results, including quantity, recycling rate, etc.																			City staff	No additional cost

Phase/Task Description	Month																		Stakeholders Involved	Estimated Cost
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Conduct ongoing education and outreach ¹⁷																			City staff Neighborhood associations Media outlets, as selected.	Cost dependent upon education and outreach methods selected.

Table Notes:

1. This schedule assumes no more than a two-season study. A four-season study would require approximately 14 months, to include adequate time for report write-up and finalization. A four-season waste characterization study can cost \$250,000 to \$400,000 depending upon the number of samples.
2. Route audits can be helpful in identifying the appropriateness of the size of carts, as well as yard trimming collection participation rates. If many households have out-of-cart yard trimming setouts, this might lead your community to consider biodegradable bags for yard trimmings, along with carts for food scraps and whatever portion of yard trimmings can fit in the cart.
3. Ideally, your community will meet several times with the mayor or mayor's staff and City Council. Community leaders should have an understanding of the potential costs and benefits of the program, and conceptually understand the existing recycling/sustainability goals (state or local) that the program will help your community reach.
4. A sample survey is included in Section E of this Tool Kit.
5. It is assumed that adequate processing capacity exists, either in the public or private sector. If additional organics processing capacity needs to be added, plan additional time for public meetings, permit acquisition, construction, etc.
6. Preliminary cost benefit analysis should identify net increases in costs, including processing costs, increased collection costs, as well as decreased garbage collection and disposal costs. These will likely be refined as equipment purchases are negotiated, etc.
7. Cost ranges are planning-level only. Vehicle costs vary significantly depending upon capacity and options selected. In general, automated collection vehicles are more costly relative to a manual-collection vehicle of similar capacity. Cart pricing varies significantly based upon transportation costs, number of carts ordered, and size of carts. It is suggested that an extra 15 percent of carts be ordered for extras and replacement. The Residential SSO Collection Model can help users determine the number of vehicles needed.
8. An education and outreach plan should include media outlets to be used for pilot study, and plans for full-scale implementation, and/or any phased-in approached. Consider the following low-cost options: web site, e-alerts, newspaper, radio, and cable television PSAs, newspaper announcements, utility bill inserts, public meetings and public events, as well as working through neighborhood associations and community contacts to disseminate information in newsletters, emails, and meetings. Additional outlets for consideration include radio ads, television ads, bus ads, newspaper and other publication advertisements, bus shelter ads and bus advertisements. However, it is important to ensure that the media outlets utilized target the households affected, and do not span an overly broad geographic area, or citizens will be confused. If carts are distributed, include clear, complete information about the program with the cart. Some communities have haulers/city crews disseminate door hangers to distribute new program information.

9. Costs will vary depending upon whether the community already has a separate yard trimmings collection program in place. In some communities, a contract may be negotiated that includes all services – garbage, recycling, and source-separated organics. The incremental cost to add food scraps to yard trimmings may be relatively low. There may be an additional time lag if a new contract is negotiated, and it does not start until the prior contract ends.
10. Most communities select a pilot program area that is representative of the community at large, and comprises no more than 25 percent of the total number of households to be served. Small communities may choose to implement the program Citywide without first conducting a pilot program.
11. Consider including on the web site an interactive map where residents can enter their address to see their collection day, a printable brochure or “How To” Guide about the SSO program, and an explanation of why the City is implementing the program. Include contact information where the web site user can turn for more information. Be sure to print the program web address on all education and outreach materials.
12. It is assumed, in this schedule, that a three-month pilot program is implemented in months 10, 11 and 12. Some smaller communities may decide not to implement a pilot program, but to implement citywide at once. Larger communities may extend their pilot program for up to six months or longer, until they feel comfortable with the program.
13. Auditing pilot program routes will help understand whether residents are clear on how to participate in the program, if cart sizes/bags are adequate, etc.
14. Auditing the processing facility will provide information regarding the degree to which residents are preparing their source-separated organics as instructed. Information obtained from the audits may be used to edit some education and outreach tools.
15. Pilot program households could be surveyed about their level of participation, barriers to participation, etc. Findings may help your community improve education and outreach efforts, or improve the design of the program. A sample post-pilot survey is provided in Section E of this Tool Kit.
16. It is assumed that all post-implementation activities would extend beyond month 18.
17. Education and outreach efforts that might be conducted post-implementation include updating the program web site (or web page), reminders in the local newspaper, meetings with neighborhood associations or providing outreach materials for inclusion in neighborhood newsletters, and outreach at public events.

Section 6

Model Request For Proposals

RFP#

**COLLECTION, PROCESSING, AND MARKETING SERVICES FOR
RESIDENTIAL SOURCE SEPARATED ORGANICS**

FOR

LOCAL GOVERNMENT

ISSUE DATE

DUE DATE

PRE-PROPOSAL CONFERENCE DATE

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Appendix A – LOCAL GOVERNMENT MAP

Appendix B – REQUIRED PROPOSAL FORMS

Section 1: GENERAL INSTRUCTIONS

General instructions will generally be specific to each local government and standard for all Request for Proposals (RfPs) issued by that local government. A list of potential content for this Section and some typical language used are described below. However, appropriate language for this Section should be acquired from the local government's procurement office.

Introduction

Local government is soliciting competitive sealed proposals from qualified firms to provide **COLLECTION, PROCESSING, AND MARKETING SERVICES FOR RESIDENTIAL SOURCE SEPARATED ORGANICS (SSO)**. The Request for Proposals (RfP), including all addenda, shall be posted on the **local government's** website at **location on local government website where RfP shall be available** or a hardcopy may be obtained at:

Local Government Department Name
Address Line 1
Address Line 2

Identify whether mandatory or optional pre-proposal meeting will be held at **time** on **day**, **date** at:

Local Government Department Name
Address Line 1
Address Line 2

All inquiries concerning this RFP must be made in writing and addressed to **local government contact** at the address or email address listed below, with e-mail being the preferred method prior to **time**, on **day**, **date**. Inquiries should reference the RFP number page, section, and paragraph.

Local Government Contact
Local Government Department Name
Address Line 1
Address Line 2
E-mail: **Email Address**

Proposals must be received no later than **time** on **day**, **date** by:

Local Government Department Name
Address Line 1
Address Line 2

Proposers are responsible for delivery of proposals by **time** on **day**, **date**. Proposals received after **time** on **day**, **date** will not be considered.

Procurement Schedule

The schedule below identifies the key milestones and associated dates for this RFP.

TABLE 1.1
RFP SCHEDULE

Milestone	Schedule
RfP Publicly Issued	Date
Identify as Mandatory or Optional Pre-Proposal Conference	Date
Deadline for Inquiries	Date
Proposal Due Date	Date
Projected Proposer Interviews	Range of dates
Projected Contract Award	Range of dates
Contract Start Date	Date

Identify as Mandatory or Optional Pre-Proposal Conference

A **identify mandatory or optional** Pre-Proposal Conference will be held at **time** on **day, date** at the **local government Department Name, address**. Attendance of Respondents at the Pre-Proposal Conference is **identify as mandatory or optional**.

Deadline for Inquiries

It is the responsibility of each Proposer to examine the entire RfP and seek clarification (inquiries). This RfP may only be modified by a written addendum. Proposer shall not rely on verbal responses to inquiries. A verbal response to an inquiry does not constitute a modification of the RfP and in no way binding upon the **local government name** or the Proposers.

All inquiries pertaining to this RfP must be made in writing and addressed to **local government contact** at **address** or **email address**, with e-mail being the preferred method prior to **time** on **day, date**. Inquiries should reference the RFP number page, section, and paragraph.

Proposal Due Date

Proposals must be received no later than **time** on **day, date** by **local government Department, address**. Proposers are responsible for delivery of proposals by the date and time set forth above. Proposals received after the date and time set forth herein will not be considered.

Projected Proposer Interviews

The **local government** may request that Proposers participate in in-person interviews with the **local government's** proposal review committee. It is anticipated that, if held, interviews with Proposers are likely to take place in **month, year**.

Projected Contract Award

The **local government** estimates that the contract(s) shall be awarded in **month, year**.

Contract Start Date

Proposer(s) awarded a contract shall commence services at 12:00 a.m., EST on **day, date**.

Restrictions on Communications

Identify any limitations on communications with local government such as the following: Except as explicitly allowed herein, any communications, verbal or written, regarding this RfP and/or any amendments to this RFP, between individuals, firms, businesses, lobbyists, or consultant with any **local government** staff, officer, elected official, or other representative of the **local government** is strictly prohibited. Violations will be reviewed and, if determined that such communication has compromised the competitive process, the proposal(s) submitted by the individual, firm, or business may be disqualified from consideration for award.

Addenda

Any addenda to this RfP will be posted at **web site**. It is the responsibility of the proposer to ensure that they have all applicable addenda prior to proposal submission.

Proposer to Make Own Examination

The data contained in this RfP is for informational purposes only. The **local government** makes no warranty as to the accuracy of this information. Proposers shall examine the service area including the streets, alleys, overhead trees, wires and such other physical conditions and requirements to be encountered in the work, the quality and quantity of service to be performed, and materials and equipment to be furnished. Proposers will not be entitled to additional compensation upon subsequently finding that conditions require methods or equipment other than that anticipated in making the proposal. Failure to make such examinations shall be at the Proposer's sole risk. The **local government** assumes no responsibility for proposer's failure to make such examinations.

Cost of Proposal Preparation

The **local government** accepts no liability for the costs and expenses associated with this RfP process incurred by the Proposers. Each Proposer cannot make any claims whatsoever for reimbursement from the **local government** for the costs and expenses associated with the RfP process.

Firm Offer

The signed proposal shall be considered a firm offer on the part of the proposer for **number** calendar days. All proposal responses shall be considered firm and irrevocable for purposes of future negotiations unless specifically waived in writing by the **local government**. The **local government** reserves the right to negotiate pricing and services.

Proposer(s) chosen for award should be prepared to have its proposal and any relevant

correspondence incorporated into the contract, either in part or in its entirety, at the **local government's** election. Any false or misleading statements found in the proposal may be grounds for disqualification.

Proposals cannot be altered or amended after the date and time of opening. Alterations made before opening must be signed by the proposer or proposer's agent. No proposal can be withdrawn after the date and time of opening without approval of **local government Department**.

Section 2: BACKGROUND

The purpose of this section of the RfP is to familiarize proposers with the service area and current and proposed solid waste services and to provide relevant data regarding the residential solid waste management programs and historic tonnages.

Purpose

Describe the purpose of the RfP and why the local government is soliciting these services, for example, current contract expiring, any relevant recycling goals established by local government, etc.

Description of Service Area and Current Services

Describe geography and demographics and solid waste and recycling services in the service area. Sections 2.2.1 and 2.2.2 provide an example of the content that can be included.

DESCRIBING THE GENERATORS TO BE SERVED

If collection will go beyond single-family households, such as to serve all residential units comprised of 1 to 4 units, this Background Section should also include information as to these customers.

Geography and Demographics

The **local government** is located **location description** and is comprised of approximately **number** square miles. Table 2-1 indicates the historic and projected population and single-family households in **local government**.

TABLE 2.1
HISTORICAL AND PROJECTED POPULATION GROWTH IN SERVICE AREA

Year	Population	Number of Single-Family Households
2005	<i>(enter data for years available and appropriate)</i>	
2010		
2015		
2020		

Cite Source:

Additional detail regarding historical growth patterns in the service area may be found at the following link: **web site with population data**. A map of service area is included in Appendix A.

Current Residential Solid Waste and Recycling Services

The **local government** provides the following solid waste and recycling services for single-family households:

- Municipal Solid Waste Services: **Describe collection frequency and set-out limits.**
- Yard Trimmings Services: **Describe collection frequency and set-out limits.**
- **Identify as Single Stream or Dual Stream or Curb Sort** Recycling Services: **Describe collection frequency and set-out limits.**
- Bulky Waste Services: **Describe collection frequency and set-out limits.**
- **List other services with description of collection frequency and set-out limits.**

In calendar year **most recent calendar year**, the **local government** collected **tons of materials** from single-family households. Table 2-2 presents a summary of historical tonnage of material, by material type, collected from single-family households in the service area by calendar year.

TABLE 2.2
HISTORICAL TONS COLLECTED FROM SINGLE-FAMILY HOUSEHOLDS

Calendar Year	Tons Collected			
	Municipal Solid Waste	Yard Trimmings	RECYCLABLES	BULKY WASTE
2007				
2008				
2009				
2010				
2011				

Currently, material collected from single-family households is disposed/processed at the facilities identified in Table 2-3 below.

TABLE 2.3
HISTORICAL AND PROJECTED POPULATION GROWTH IN SERVICE AREA

Disposal/Processing Facility Information			
Material	Name	Owner	Address
Municipal Solid Waste			
Yard Trimmings			
Recyclables			

Disposal/Processing Facility Information			
Material	Name	Owner	Address
Bulky Waste			

Yard Trimmings Services

If the local government collects yard trimmings from customers, this section should discuss whether the program will continue or be discontinued.

Composition of Municipal Solid Waste

If the local government has conducted a characterization study regarding the composition of Municipal Solid Waste, this section should include a summary of the study and identify where the final report may be located. If the local government has not conducted a characterization study regarding the composition of Municipal Solid Waste, this section may reference other regional characterization studies such as the Georgia Statewide Waste Characterization Study, available at the Georgia Department of Community Affairs website.

Definitions

Some definitions are suggested but these should be adjusted to be consistent with local and state definitions in your location as well as the language used in the final RfP.

For purposes of this RFP and subsequent contract, the following definitions shall apply:

Acceptable Source Separated Organics means Source Separated Organics that are accepted in the Program as defined in the final Contract.

Cart means a receptacle, equipped with wheels, and bar with a capacity of **insert capacity** designed to be mechanically dumped into a loader-packer type truck via a fully automated truck arm and semi-automated truck tipper purchased with a ten (10) year manufacturer's warranty and approved for use by **local government**.

Local government means the local government of **local government** and shall include local government's officers, elected officials, employees, agents, volunteers and representatives.

Collect or Collection shall mean the act of removing Source Separated Organics for transport to the Source Separated Organics Facility.

Contract means the final negotiated and executed contract between the **local government** and selected Proposer.

Contractor means the selected Proposer contracted by the **local government** to provide the Program.

Contamination means the existence of any material or substance on or contained in Acceptable Source Separated Organics that is not considered Acceptable Source Separated Organics.

Disposal means the final deposition of solid waste includes, but is not limited to deposition in landfills or solid waste thermal treatment technology facilities.

Disposal Site means any facility or location where the final disposition of solid waste occurs and includes, but is not limited to, landfilling and solid waste thermal treatment technology facilities. A Disposal Site shall be licensed and permitted for disposing of Solid Waste, as required, by all governmental bodies having jurisdiction.

Generator means any person who creates Source Separated Organics.

Landfill means an area of land on which or an excavation in which solid waste is place for permanent disposal and which is not a land application unit, surface impoundment, injection well, or compost pile.

Marketing means identification and development of end markets for the product made from Source Separated Organics and the selling of this product to end markets.

May means something that is not mandatory but permissible.

Municipal Solid Waste means any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and means solid waste from single family and multifamily residences, hotels and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste, but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations.

Processing means the conversion of Source Separated Organics to a marketable product.

Program means the collection, processing, and marketing of Source Separated Organics collected from single-family households in a Contract with the **local government**.

Recycling means any process by which materials which would otherwise become solid waste are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

Residue means the material that remains after Source Separated Organics have been processed and the marketable material removed.

Shall means mandatory and not merely directory.

Solid Waste means any garbage or Municipal Solid Waste; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include recovered materials; solid or dissolved materials in domestic sewage; solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. Section 1342; or source, special nuclear, or by-product material as defined by the federal Atomic Energy Act of 1954, as amended (68 Stat. 923).

Source Separated means the separation of Acceptable Materials from solid waste at the place where the waste originates.

Source Separated Organics (SSOs) means any and all Accepted Materials with no more than 10 percent contamination by weight present at the time of collection.

Source Separated Organics Facility means any facility or location where the processing of source separated organics occurs. A source Separated Organics Facility shall be licensed and permitted for processing Source Separated Organics, as required, by all governmental bodies having jurisdiction.

Will means mandatory and not merely directory.

Yard Trimmings means leaves, brush, grass clippings, shrub and tree prunings, discarded Christmas trees, nursery and greenhouse vegetative residuals, and vegetative matter resulting from landscaping development and maintenance other than mining, agricultural, and silvicultural operations.

Section 3: SCOPE OF SERVICES

The purpose of this Section is to describe the services that the local government is requesting. The more detail the local government provides in the Scope, the more comparable the proposals will be to one another. In addition, the more detailed scope of services allows Proposers to accurately estimate costs for the level of service requested. An open-ended Scope of Services leaves more room for Proposers to offer diverse ideas for how to accomplish local government objectives.

ONE OR TWO RfPs?

Although this RfP is written for a single Contractor to provide collection *and* processing/marketing of Program Source Separated Organics throughout the service area, another option is to solicit collection services separately from processing/marketing services, either with two separate RfPs or by allowing a Proposer to propose on one or both of these services with one RfP. If two RfPs are issued then it may behoove the local government to procure a processing contractor before issuing a collection RfP to better identify the collection requirements that best meet the selected processor's specifications.

Introduction

The Contractor shall be responsible for performing all work as outlined in the specifications herein and shall provide and furnish all labor, materials, equipment, supplies, Source Separated Organics Facility, and Disposal Site as required to perform and complete the collection, processing, and marketing of all Source Separated Organics collected through the Program.

Term

Initial Term

The initial term of the Contract between the **local government** and the successful Proposer shall be for **number of years, (a minimum of five years is recommended for proposers to have the opportunity to at least partially recoup their capital costs, possibly 10 years if a new facility is being constructed)**.

Optional Renewal Terms

The Contract may be renewed by **local government** for up to **number of renewal terms additional number of year terms (for example, up to three (3) additional five (5) year terms)**.

GENERATORS TO BE SERVED

This model RfP is for collection from single-family households. However, an RfP could also request collection services for multi-family residential units and commercial generators. The type of materials collected, container requirements, etc. would need to be adjusted for multi-family units and commercial generators accordingly.

Service Area

The Contractor shall collect, process and market Acceptable Source Separated Organics from **describe the type of customers** located in the **define the area to be served and consider including a map**.

Acceptable Materials

The Contractor shall at a minimum collect and process the following organics:

- Yard trimmings.
- Food scraps: Bread, grains, pasta, coffee grounds with paper filter, dairy, eggshells and eggs, fruit, vegetables, meat, poultry, seafood, shells, and bones.
- Food soiled paper: Coffee filters, greasy pizza boxes, paper cups and plates, napkins, paper towels, paper take-out boxes and containers, and similar items.
- BPI certified compostable plastic bags and cutlery.

Proposers are encouraged to identify organics beyond those listed above that at the sole option of the **local government** may be collected, and processed as part of the Program.

Collection Frequency, Location, Schedule, and Routes

Frequency of Collection

The Contractor shall collect Acceptable Source Separated Organics **insert frequency** from each customer on a scheduled collection day.

WHO CHOOSES COLLECTION DAYS?

The approach shown here leaves it up to the Contractor to arrange the collection schedule. However, the local government may want to stipulate the days collection will take place, for example, to match the Program collection day with the municipal solid waste and/or recycling collection day.

Location

Contractor shall collect Acceptable Source Separated Organics from each customer at the curbside.



A local government may want to offer backdoor collection for those who cannot bring the cart to the curb. If the local government offers backdoor collection, include a detailed description of who may receive backdoor collection and if such services will be provided at no additional cost.

Collection Days and Times

Excluding holidays, the Contractor shall collect Acceptable Source Separated Organics **Monday through Friday** between **6 a.m., EST and 6 p.m., EST**. Holidays shall include the following:

- **List Holidays**
- **List Holidays**
- **List Holidays**



Collection days and operating hours may be set to match municipal solid waste and/or recyclable collection days and hours.

If a holiday occurs on a scheduled collection day, the Contractor shall perform the scheduled collection for the holiday on **describe protocol** and the remainder of the collections during the calendar week in which such holiday falls on **describe protocol**.

Local government may restrict collection hours in areas impacted by commute traffic, road repair, and school hours or where continued complaints about noise from collection vehicles has occurred.

Collection Routes

The Contractor shall maintain the collection routes on file with **local government**. Any changes to the collection routes are subject to the approval of **local government**.

Purchase, Exchange/Replacement, Distribution, and Ownership of Carts

WHO PROVIDES CONTAINERS?

The model RfP is written assuming that the Contractor provides the containers. Other options are for the local government to provide the containers or for participating residents to provide the containers. The latter is most viable when bags are being used and is least viable if automated or semi-automated collection vehicles will be used.

Purchase of Carts

The Contractor shall provide each customer, including new customers during the term of the contract, with one **size in gallons** capacity cart at no additional cost. **Local government** retains the final right to approve the cart including, but not limited to, the color, design, and labeling of the carts.

CART SPECIFICATIONS

The model RfP requires the Contractor to submit cart specifications for approval but a local government may want to identify its own requirements, such as:

- Appearance: laminated, embossed, hot-stamped to indicate for green waste only, Contractor/local government name, unique identification number, certain color.
- Design: heavy-duty wheels, attached hinged lids, resistant to inadvertent tipping, UV protected lids.
- Sustainability: warranty, recycled material content, fully recyclable when service life ends .

Exchange/Replacement Carts

The Contractor shall provide an exchange/replacement cart to a customer at the request of the **local government** within two business days after receiving a request from the **local government**, and pick up the old cart should the request be for an exchange. The **local government** will reimburse the Contractor for the expense of the exchange or replacement cart at the rate stipulated in Form E. The Contractor will document the date the request was received from the **local government**, the address for the customer, and the date the exchange/replacement cart was provided on the regular monthly invoice submitted to the **local government**.

OTHER CONTAINER TYPES

The model RfP assumes that Residential SSO will be collected in carts provided by the Contractor. Other options are smaller, rigid containers or compostable paper or plastic bags (depending on the material to be collected) provided by the resident. The RfP could also require the Contractor to provide each resident with a food waste pail to keep in their kitchen. This may increase participation by residents but is also likely to increase costs.

Distribution of Carts

The Contractor will deliver one cart to each customer in the service area between one and two weeks prior to **collection start date**.

Ownership of Carts

On or before the **collection start date**, the Contractor shall transfer title to carts, without lien(s), to **local government**. After the **collection start date**, Contractor shall transfer title to **local government**, without lien(s), to any and all carts purchased pursuant to the Contract upon Contractor's receipt of such carts.

Unaccepted Set Out

The Contractor may conduct a visual screening of material in carts provided prior to collection to determine if a set-out is an Unaccepted Set-out. Contractor may deem a set-out a Unaccepted Set-out if a set-out contains more than **insert protocol** of material other than Acceptable Materials. Contractor may not collect set-outs deemed Unaccepted Set-outs. If Contractor does not collect an Unaccepted Set-out, the Contractor must leave a notice with the Unaccepted Set-out, the form of which will be approved by the **local government**, identifying the reason the set-out was deemed an Unaccepted Set-out. For each Unaccepted Set-out, the Contractor must document the address, date and time, and reason for the Unaccepted Set-Out in a form to be approved by the **local government**. The information regarding Unaccepted Set-outs must be submitted electronically to the **local government** by 5 p.m., EST on the day that the set-out was deemed an Unaccepted Set-out.

Vehicles

The Contractor shall utilize vehicles that comply with all federal, state, and local laws and regulations, including clean air standards.

WHO SPECIFIES VEHICLES?

The model RfP suggests some vehicle specifications. Rather than define vehicle criteria, the RfP can require Proposers to describe the vehicles to be used. Specifically identifying such criteria as done in the model language levels the playing field and makes it easier to compare proposals. On the other hand, strict vehicle requirements may increase cost and eliminate some proposers.

The Contractor shall equip each vehicle with on-board GPS route/customer tracking with real-time direct link to customer service center, as well as safety markers, back-up cameras, and on-board spill kits. In addition, the Contractor shall equip each vehicle with at least one broom and one shovel for use in cleaning up spillage.

Contractor shall conduct pre- and post-trip inspections of all vehicles. In addition, Contractor shall wash each vehicle daily and steam-clean each vehicle weekly.

The **local government** encourages the use of vehicles that exceed the minimum air quality standards, including the use of compressed natural gas powered collection vehicles and hybrid powered support vehicles.

! Make sure requirements for vehicles are consistent with local law regarding vehicles operating under local government contract. Some local governments may specify emissions standards, fuel type, safety equipment, covering requirements, weight limits, etc. in addition to state and federal requirements. Some examples are included in the model RfP.

Personnel

The Contractor shall provide adequate experienced personnel to provide services pursuant to this Contract. Contractor shall provide the name, office telephone number, mobile phone number, email address, and fax number of Contractor's key personnel to the **local government**. Contractor shall update key personnel records as personnel or contact information changes. Key personnel shall include, at a minimum, a Program Manager, one or more Collection Supervisor(s), and a facility/site Manager for each processing facility.

Contractor's employees shall treat any individual, including but not limited to customers, co-workers, **local government** staff, with whom they come in contact in the performance of their duties in a polite and courteous manner. The **local government** reserves the right to direct Contractor to remove any employee who violates this policy from providing services to the **local government**.

Training

Contractor shall provide regularly scheduled, on-going operations and safety training for all employees. Training manuals and schedules shall be maintained by the Contractor and available for review at any time by the **local government**.

Public Education and Outreach

The Contractor will be required to provide the following support to the **local government's** education and outreach efforts.

WHAT ROLE DOES CONTRACTOR PLAY IN PUBLIC EDUCATION?

This model RFP identifies minimal participation by the Contractor in the public education and outreach program. A local government could require the Contractor to develop a web site and/or printed materials to promote the Program and/or provide an education and training center at the Source Separated Organics Facility.

Technical Input

As requested by the **local government**, the Contractor shall provide technical input to the **local government's** public education and outreach efforts.

Contractor's Public Education and Outreach

The Contractor will develop, print, and distribute at Contractor's sole expense the following:

- **Program Introduction Notice:** The Program Introduction Notice shall include (a) the collection days, (b) set-out guidelines, (c) Contractor's customer service telephone number, and (d) any other information the **local government** requests. A Program Introduction Notice will be delivered with each Cart.
- **Unaccepted Set-out Notice:** Unaccepted Set-out Notice shall include one (1) original with two (2) carbon copies. The Unaccepted Set-out shall include (a) the date (b) reason for non-collection, and (c) Contractor's customer service telephone number, and (d) any other information the **local government** staff requests. An Unaccepted Set-out Notice shall be attached to each unaccepted set-out.
- **Route Change Notice:** The Route Change Notice shall include (a) the date route change shall be implemented (b) new collection days, and (c) Contractor's customer service telephone number, and (d) any other information the **local government** requests. Contractor shall mail the Route Change Notice to each Customer a maximum of thirty (30) calendar days prior and a minimum of fourteen (14) calendar days prior to implementation of the route change.
- **Annual Program Notice:** The Annual Program Notice shall include (a) the collection days, (b) set-out guidelines, (c) Contractor's customer service telephone number, and (d) any other information the **local government** requests. Contractor shall mail the Annual Program Notice to each Customer a maximum of thirty (30) calendar days prior and a minimum of fourteen (14) calendar days prior to the start of each calendar year.

In addition, Contractor will post information about the Program on their company web site, at the request of the **local government**. All public education and outreach developed, printed, and/or distributed by the Contractor shall be approved by the **local government**.

Local Office and Customer Requests and Complaints

Local Office

Contractor shall maintain a local office, staffed with personnel **Monday through Friday, 8:00 a.m., EST to 5:00 p.m., EST**, within the **local government** limits. The Contractor shall staff the local office with qualified representatives to communicate with the public. The Contractor will provide customers a toll-free telephone number and an e-mail address for complaints, comments, or reports of missed pick-ups. The Contractor's telephone system shall adequately handle the volume of calls typically experienced on the busiest days and shall have an

answering service or voice-mail system available for calls received during non-business hours and Holidays.

Customer Requests and Complaints

Contractor shall handle all customer requests and complaints. Contractor shall resolve each request/complaint as follows:

- If the complaint is a missed collection and Contractor cannot provide proof that the collection is not a missed collection, such as a time stamped photograph, Contractor shall pick up the missed collection on that same day if the complaint is received by the Contractor prior to 1:00 p.m., local time.
- If the complaint is a missed collection and Contractor cannot provide proof that the collection is not a missed collection, such as a time stamped photograph, Contractor shall pick up the missed collection before 5:00 p.m., local time on the next calendar day if the complaint is delivered to Contractor after 1:00 p.m., local time.
- For all other complaints, Contractor shall resolve the complaint within twenty four (24) hours of notice of such complaint to Contractor.

Record of Customer Communications

The Contractor will notify the **local government** of all customer communications, including but not limited to requests and complaints.

Recordkeeping and Reporting

The Contractor shall create, maintain, and make available records as defined in, and required by the **local government** and/or applicable local, State and Federal laws, rules and regulations. In addition, the Contractor shall submit daily, monthly, and annual reports to the **local government** as described below.

! The model RfP contains some records that the local government may want to require to measure performance. However each local government will have its own set of records that are either required or be helpful to provide data needed to provide its own reports to state government agencies or to local elected officials.

Recordkeeping

The Contractor shall create, maintain, and make available records as defined in, and required by the **local government** and/or applicable local, State and Federal laws, rules and regulations including but not limited to the following:

- Customers by address;
- Unaccepted set-outs by address;
- Tonnage of material collected by route and identification of Source Separated Organics Facility such material was delivered;

- Tonnage and type of end product generated by Source Separated Organics collected in the Program;
- End-product markets including quantity sold, end-user name and address, description of end use, and price paid or revenue received;
- Tonnage of residue generated by Source Separated Organics collected in the Program;
- Number of initial Carts distributed including addresses and date delivered;
- Number of exchange/replacement Carts distributed including identification as exchange or replacement, addresses, and date delivered;
- Customer communications with itemized detail regarding the nature of all communications (i.e. comment, complaint, request, etc.) and the time and manner in which they were resolved by Contractor;
- Trainings including date, duration of training, topic discussed, attendees, etc.; and
- **Identify other records**

The Contractor shall make all records available to **local government** at reasonable times and places throughout the term of the Contract and for a period of five (5) years after last or final payment.

Daily Reporting

The Contractor shall submit a daily report by 5:00 p.m., local time, on each day on which collection takes place. The daily report shall identify any complaints and service requests received that business day and shall indicate the name, address, time reported, resolution, and time resolved. The daily report shall also indicate any unaccepted set-outs, including the address, reason for rejection, and action taken by the driver. This report shall be submitted electronically in a format that will be included as part of the Contract.

Monthly Reporting

The Contractor shall submit a monthly report within seven calendar days following the end of each calendar month. The monthly report shall provide the following information:

- Customers by address;
- Unaccepted set-outs by address;
- Tonnage of material collected by route and identification of Source Separated Organics Facility such material was delivered;
- Tonnage and type of end product generated by Source Separated Organics collected in the Program;
- End-product markets including quantity sold, end-user name and address, description of end use, and price paid or revenue received;
- Tonnage of residue generated by Source Separated Organics collected in the Program;
- Number of initial Carts distributed including addresses and date delivered;
- Number of exchange/replacement Carts distributed including identification as exchange or replacement, addresses, and date delivered;
- Customer communications with itemized detail regarding the nature of all communications (i.e. comment, complaint, request, etc.) and the time and manner in which they were resolved by Contractor;
- Trainings including date, duration of training, topic discussed, attendees, etc.; and
- **Identify other records.**

This report shall be submitted electronically in a format that will be included as part of the Contract.

Annual Reporting

The Contractor shall submit all annual reports within 30 calendar days following the end of the **local government's** fiscal year. The annual report shall summarize, by month and annually, the information contained in the monthly report. This report shall be submitted electronically in a format that will be included as part of the Contract.

Source Separated Organics Facility and Disposal Site

Source Separated Organics Facility

The Contractor shall deliver the Source Separated Organics collected via the Program to a Source Separated Organics Facility that converts Source Separated Organics into a marketable end product. If during the term of the Contract the Contractor wants to deliver Source Separated Organics collected via the Program to a Source Separated Organics Facility other than the Source Separated Organics Facility specified in the proposal, Contractor shall submit a written proposal, with the information included on Form C and a reason for the proposed change, to the **local government** for approval at least one month prior to the proposed change. During the term of the Contract, the Contractor shall maintain documentation of the status of Source Separated Organics Facility to which Contractor delivers Source Separated Organics collected via the Program including the licenses and permits for such facilities.

Disposal Site

The Contractor shall dispose of Residue at a properly permitted Disposal Site. If during the term of the Contract the Contractor wants to deliver Residue to a Disposal Site other than the Disposal Site specified in the proposal, Contractor shall submit a written proposal, with the information included on Form D and a reason for the proposed change, to the **local government** for approval at least one month prior to the proposed change. During the term of the Contract, the Contractor shall maintain documentation of the status of Disposal Site for which Contractor delivers Residue including the licenses and permits for such facilities.

DISPOSAL FACILITIES

In the model RfP, the Contractor selects the Disposal Site where residue will be delivered. If the local government owns a Disposal Site or has a contract with a Disposal Site, it may want to stipulate where the residue is disposed. The local government may also want to identify the cost per ton for disposal at these facilities so that all Proposers are working with the same assumptions regarding disposal costs.

Processing and Marketing Requirements

Processing Requirements

The Contractor shall process Source Separated Organics collected through this Contract into the marketable end product(s) identified in the Contract. The Contractor shall process a minimum of **percentage** percent (**percentage** %) by weight of Source Separated Organics collected via the Program into marketable end product(s) identified in the Contract. In addition, the Contractor shall process Source Separated Organics collected via the Program to meet product specifications of buyers.

Marketing Requirements

A minimum of thirty calendar days prior to collection start date, Contractor shall submit for approval a detailed marketing plan describing the marketing of end product generated by this Contract. Contractor shall not market any Source Separated Organics collected as a result of this Contract or end product generated as a result of this Contract to markets that the Contractor knows or reasonably should have anticipated will dispose of the Source Separated Organics or end product as Solid Waste except when authorized in writing by the **local government**.

WHAT IS AN ACCEPTABLE END USE?

The model RfP allows Source Separated Organics to be converted to an "end product" to be defined by the Proposer. A local government may want to stipulate what uses are excluded or preferred. For example, does the collected Residential SSO have to be composted? Is using the material for boiler fuel acceptable? How about daily cover at a landfill?

LOCAL GOVERNMENT USE OF PRODUCT

The RfP could stipulate that the local government gets a specified amount of, or right of first refusal to take or purchase, the end product for use in its own operations. This could reduce the purchase cost for materials the end product replaces.

Administrative Charges

The Contractor understands that if the Contractor does not perform its obligations in a timely manner pursuant to the Contract, the Local government will suffer damages which are difficult to determine and quantify. The Contractor agrees, in addition to any other remedies available to the Local government, that the **local government** may withhold payment from the Contractor in the amounts specified below as administrative charges for failure of the Contractor to fulfill its obligations.

- Failure to respond to any customer complaint received in accordance with Contract: **administrative charge** per calendar day thereafter per incident
- Failure to maintain vehicle in accordance with Contract: **administrative charge** per vehicle per incident
- Failure to provide Carts in accordance with this Contract: **administrative charge** per cart
- Failure to provide a complete reports: **administrative charge** each incident per day
- Failure to leave an education tag on an unaccepted set-out: **administrative charge** each incident
- Failure to comply with hours of operation: **administrative charge** per half hour per incident
- Failure to be able to accept materials on any day after the date upon which service begins on which materials are to be collected: **administrative charge** each day
- Disposal of Source Separated Organics and/or end product: **administrative charge** each incident
- **Identify other acts or omissions subject to administrative charges**

The Contractor shall be liable for administrative charges amount(s) upon determination of the **local government** that performance has not occurred consistent with the provisions of the Contract. The **local government** shall notify the Contractor of each act or omission reported to

or discovered by the **local government**. It shall be the duty of the Contractor to take whatever steps or action may be necessary to remedy the cause of the complaint.

The **local government** may deduct the full amount of the administrative charges from any payment due to the Contractor. The remedy available to the **local government** under this section shall be in addition to all other remedies which the **local government** may have under law or at equity.

Costs and Revenues

The Contractor shall be solely responsible for any and all costs associated with the collection and processing, including residue disposal costs, of Source Separated Organics collected under this Contract and marketing of end product generated by this Contract. The Contractor shall retain all revenue associated with marketing of end product generated by this Contract.

CONTRACTUAL INCENTIVES TO INCREASE PERFORMANCE (TO BE REVISED)

The local government could include provisions in the RfP and Contract to encourage maximum diversion. For example, the local government could:

- Pay the Contractor a per-ton bonus for recovered tonnage over a base amount
- Require Contractors to achieve minimum recovery levels or pay liquidated damages
- Compensate Contractor based on tonnage recovered as opposed to a per household fee

Annual Cost Adjustments

Identify procedure for annual costs adjustments acceptable to local government, perhaps those used in similar contracts. Consider fuel surcharges and cap to annual adjustment.

ANNUAL RATE INCREASE

The model RfP requests that the Proposer suggest the basis for increasing (or decreasing) rates each year. However, a local government can specify the basis for the change in rates in the RfP. Some local government have a standard index it uses for this purpose such as a defined component of the Consumer Price Index, which is tied to inflation. Often, collection contracts such as this will include a provision for an adjustment based on changes in the cost of fuel. Make sure that the RfP and final Contract allow for decreased rates in the event of deflation.

Access to Source Separated Organics Facility and Disposal Site

The Contractor shall allow the **local government** access to the Source Separated Organics Facility including periodic visual monitoring and to collect samples to complete composition audits. In addition, the Contractor shall allow the **local government** access to the Disposal Site including periodic visual monitoring of Residue from the Contract and to collect samples to complete composition audits.

Billing

Monthly invoices for services should be submitted to **contact name, address, and telephone number** within 30 days following the last day of the month of service. Invoices should identify the number of customers served, the contracted cost per customer, and the total cost for the month.

The invoice should list any replacement or exchanged containers delivered in the month, the street address where the container was delivered, the date requested, the delivery date, the reason for the delivery, the cost per container in accordance with the Contract fees, and the total cost of replacement or exchanged containers delivered.

WHO BILLS CUSTOMERS?

The model RfP assumes that the local government will pay the Contractor for the services and will raise revenue for the service for the households served accordingly.

Alternatively, the local government can require the Contractor to bill residents directly. If this is the approach taken, this section should describe the billing requirements such as the frequency and form of bills to residents and how delinquent accounts will be handled. A local government should be aware that the added cost for the Contractor to bill residents is likely to increase total costs per household. However, depending on how the local government collects revenue to pay the Contractor, it could also cost the local government money as well.

Ownership of Materials

Ownership of Source Separated Organics collected by the Contractor shall remain with the Contractor from the time of collection until the time the Contractor transfers ownership to a processor or end user whichever is sooner.

OWNERSHIP OF MATERIALS

The model RfP is written whereby the Contractor owns the materials as soon as they are collected. If the collection and processing Contractors are different entities, a local government may want to specify that the ownership of collected Residential SSO remains with the local government until the collector delivers them to the processor at which time the ownership is transferred to the processor.

Addition/Removal of Acceptable Materials

During the term of the Contract, the successful Proposer may submit a written request to the **local government** to add or remove items from Acceptable Materials. The Contractor shall not add or remove items identified as Acceptable Materials without prior written authorization by the **local government**. If the **local government** authorizes the addition of an Acceptable Material, the **local government** and Contractor will mutually agree to the specifications required and the date on which the added Acceptable Material will be accepted. If the **local government** authorizes the removal of an Acceptable Material, the Contractor shall accept and process the new Acceptable Material through the effective date of removal as specified in the written authorization signed by the **local government** and the Contractor.

If the **local government** authorizes the addition of a Acceptable Material, any cost adjustments as a result of such addition shall be limited to the actual documented costs less revenues proportional to the tonnage of such Acceptable Material to be collected, processed, and marketed. If the **local government** authorizes the removal of an Acceptable Material, any cost

adjustments as a result of such removal shall be limited to actual documented costs less cost savings proportional to the tonnage of such Acceptable Material no longer collected, processed, and marketed.

Disposal of Source Separated Organics or End Product as Solid Waste Prohibited

The Contractor shall not dispose of any Source Separated Organics collected as a result of the Contract or end product generated as a result of this Contract as Solid Waste except when authorized in writing by the **local government**.

Section 4: PROPOSAL CONTENT AND EVALUATION

The purpose of this section of the RfP is to describe the format and content of Proposals and the process by which Proposals will be evaluated.



The model RfP contains suggested content for a proposal. A local government may have required content for all or specific types of proposals that should be included here.

Proposal Content

The submitted proposal must follow the following order and format.

Cover Letter

The cover letter shall include a statement that the proposal is a firm offer for **insert number of days (insert number of days)** calendar days from the opening date. In addition, the cover shall include a statement of the work to be accomplished, how Proposer proposes to accomplish and perform each specific service and unique problems perceived by Proposer and their solutions. The cover letter must be signed by an individual who is authorized to bind the Proposer contractually.

Company Information

A brief description of the company including identification of the type of organization, (corporation, partnership, joint venture, etc.). In addition, Proposer shall include a description of the company's experience relevant to the scope of services requested in this RfP.

Subcontractors

A description of the proposed involvement of subcontractor including their role and responsibilities, name, and qualifications.

Program Understanding

A statement of the Proposer's understanding of the services being sought.

Project Personnel

Proposer shall identify the name, role, and qualifications of the key people responsible for providing the services described. At a minimum, this must include a description of the Project Manager that will have the primary responsibility for providing the service as well as other key staff people such as route supervisors and facility managers. In this section, Proposer shall describe, at a minimum, the following:

- Policies and procedures that are in place to ensure that personnel performing services are qualified and proficient;
- Training programs and frequency for personnel;
- Safety, dress, and other codes required for personnel; and
- Policies that are in place to hire and retain qualified employees.

Current and Past Experience

Proposer shall identify all relevant projects of similar size and scope performed over the past **number** years. The list of relevant projects must be up to date with the accurate name, phone number, and e-mail address or contact person and estimated quantity of Source Separated Organics collected per year. Lastly, Proposer shall identify any contract, relevant or not relevant to the scope of services, which ended prior to the Contract expiration date due to assignment of the Contract to another vendor, termination of the Contract, mutual agreement to discontinue service, or for any other reason.

Technical Expertise

A description of Proposer's technical expertise in the operation of Source Separated Organics collection, processing, and marketing services. This Section should demonstrate an understanding of applicable laws, rules, and regulations.

Project Approach

A description of how the Proposer intends to collect Source Separated Organics from the service area, number of routes, households served per route, customer service approach, etc. This must include a detailed description of how the Source Separated Organics will be collected, stored, processed, and marketed, including the type of carts (to be described in Form A) and the type of vehicles (to be described in Form B) and equipment that will be used. The project approach should describe how the Source Separated Organics will be handled once collected including a description of the Source Separated Organics Facility (to be described in Form C) , a description of the processing technology, and end markets for materials, how residuals will be minimized and where they will be disposed (to be described in Form D). In the Project Approach, indicate any limits on the quantities that can be handled. For all Source Separated Organics Facilities and Disposal Sites, include relevant safety records and information regarding notifications, violations, citations received from any federal, state, local, regional, or tribal agency for the past two years.

Pricing

The Proposer should indicate the rate per customer per month to provide the services described in this RfP. The rates should include the cost to provide one **number** gallon cart, weekly curbside collection of Source Separated Organics, processing of Source Separated Organics, marketing of end product, and disposal of residue. The proposed rates will be in effect for the initial one-year term of the Contract. The Proposer should also provide rates for providing a replacement and exchange cart to a customer upon request by the **local government**. All of this information should be provided in Form E.

SHOULD COST PROPOSALS BE SUBMITTED WITHIN THE STANDARD PROPOSAL OR IN A SEPARATE ENVELOPE?

Some local governments require that costs be submitted separately while others allow the issuing Department to make this decision. If costs are submitted separately, evaluators can consider the proposer's approach and qualifications without being influenced by cost. Once the proposals are ranked based on other factors, the costs are considered. On the other hand, some local governments prefer to look at the cost of each proposal at the same time they consider approach and qualifications.

Financial Capability and Insurance

The Proposer must provide audited financial statements for the most recent three fiscal years. Audited financial statements should include balance sheet, income statement, statement of changes, footnotes, and subsidiary schedules. In the event that a Proposer does not have audited financial statements, three years of tax returns, with supporting schedules, may be provided on an exception basis.

! Each local government is likely to have its own requirements for a Proposer to demonstrate financial capability. Brief language has been included in this model RfP as an example.

Financing of these services and equipment will be the sole responsibility of the Contractor. The Proposer must demonstrate that it can provide the required financing from either 1) internally generated funds or 2) commitments from external sources.

The **local government** reserves the right to require submission by Proposer, at no cost to the **local government**, of an opinion by a Certified Public Accountant with regard to the financial status of such Proposer, including ownership of, or interest in, equipment and facilities prior to the award of an Contract.

As is set forth in this RfP, the **local government** will make reasonable effort, but makes no representation that it will be able to maintain total confidentiality of Proposer's financial information.

Proposal Alternatives

Proposers may submit alternatives or exceptions to the services or terms listed in this RfP to the extent that such alternative or exception is an improvement in service or price. The **local government** reserves the right to accept or reject alternatives or exceptions to the services or terms listed in this RfP.

Selection Process

The **local government** will objectively evaluate the proposals submitted to determine the best value for the **local government** and its residents. The **local government** shall review the Proposals based on the following criteria (order of list does not imply rank of importance):

- Understanding and familiarity with services sought;
- Project personnel, personnel experience, and use of subcontractors;

- Proposer's experience and operation record, including past experience with providing similar services to other jurisdictions;
- Proposer's technical expertise, knowledge, and understanding of applicable laws, rules, and regulations;
- Proposer's project approach;
- Facilities to be used to process/manage collected materials;
- Type of equipment used for collection and processing;
- End product being produced;
- Cost of providing services (per household) including cost of containers and other materials;
- Financial capacity for handling services, including insurance coverage and Proposer's ability to protect local government from liability; and
- References.

After ranking Proposals based on these criteria, interviews may be conducted with the top ranked firm(s).

EVALUATION CRITERIA

A local government may want to include the criteria provided in the model RfP and/or add others based on local procurement requirements or priorities for the Residential SSO program. Evaluation criteria can be listed in a random order, as they are in the model RfP, listed in order of priority, or points can be assigned to each in the RfP.

OTHER POTENTIAL CONTENT

Some other terms, forms, and issues that a local government may want to address in an RfP for Residential SSO collection and processing include those listed below. These are general terms that may be specific to a local government's procurement policies and do not necessarily represent a comprehensive list of the content that should be included in a standard RfP for all local governments.

- Copy of the Contract between Contractor and Local Government and request for proposer to either accept terms of contract or identify exceptions
- Insurance requirements
- Performance monitoring
- Liquidated damages
- Proposal and/or performance bond
- Conflict of Interest
- Non-collusion affidavit
- Certification of non-gratuities

Appendix A– SERVICE AREA MAPS

Appendix B – PROPOSAL FORMS

FORM A CART SPECIFICATIONS	
Manufacturer	
Material of Construction	
Recycled Content (percentage)	
Manufacturing Method (rotational molding, injection molding, other)	
Color	
Durability (in service years)	
Cost of Each Container	
Dimensions of Each Container (length x width x height)	
Wheel Size	
Manufacturer's Warranty (10 year minimum)	

FORM B				
VEHICLE SPECIFICATIONS				
Manufacturer and Model				
Cab and Chassis				
Body				
Engine				
Transmission				
Cab and Chassis				
Cab Height				
Number of Axles				
Overall Length with Body Mounted				
Body				
Type of Body				
Rated Capacity (cubic yards)				
Practical or Net Capacity (cubic yards)				
Overall Body Length (inches)				
Body Height (inches)				
Body Width (inches)				
Loading Height Above Ground (inches)		Minimum	Maximum	
Weight (pounds)		GVW	Tare	
Will the vehicles be owned, leased, or other?				
Purchase cost of each vehicle				
Fuel type				
Fuel usage (miles per gallon)				
Emissions rating (g/bhp/hr)	CO	HC	NO _x	Particulate Matter
Safety Features				
Color				
GPS Monitoring and Tracking Capabilities				

Manufacturer's Warranty (10 year minimum)	
Describe any other benefits of vehicle in terms of past experience, efficiency, ease of operations, cost of operations, fuel efficiency, clean air standards, etc.	

FORM C SOURCE SEPARATED ORGANICS PROCESSING FACILITY	
Name	
Location	
Proposer's Role (owner, customer, etc.)	
Other Contracting Parties	
Name, address, telephone number of owner	
Types of Materials Accepted	
State Permit Number	
Reported Tons per Year Accepted	
Reported Permitted Capacity	
Per ton processing fee	
End product(s)	
Markets for end product(s)	

FORM D DISPOSAL SITE FOR RESIDUE	
Name	
Location	
Proposer's Role (owner, customer, etc.)	
Other Contracting Parties	
Name, address, telephone number of owner	
State Permit Number	
Reported Tons per Year Accepted	
Reported Permitted Capacity Remaining	
Per ton disposal fee	

FORM E	
RATES IN EFFECT THROUGH DATE	
Base Service	
Source Separated Organics Collection, Processing, and Marketing (including the provision of one number gallon cart and curbside collection and processing as described in Section 3 of the RfP)	\$ _____/customer/month
Additional Services	
Additional Cart Exchange (Contractor picks up damaged cart)	\$ _____ each additional cart
Additional Cart Replacement	\$ _____ each additional cart

Section 7

Sample Residential Source Separated Organics Ordinance Provisions

Introduction

Only a few local governments in the United States have mandatory residential source separated organics collection programs. Generally, these ordinances take two approaches. They either require all haulers collecting refuse from residential customers to offer collection of source separated organics or they prohibit residents from placing specified organics in a container with refuse. Typically, if a local government takes the second approach, prohibiting the placement of organics in refuse, then the local government either collects source separated organics from residents directly or through a contractor or the ordinance also includes language that requires private haulers operating in the jurisdiction to collect source separated organics.

This Section of the Tool Kit provides provisions from the municipal code of two cities, one that takes each of these approaches. The City of San Francisco requires all single-family households to separate designated organics from refuse and to place these materials in a separate container. The City of Boulder requires private haulers to offer organics collection to residential customers and to incorporate the cost of providing this service into the base rate for refuse, recyclable, and organics collection.

Definitions

San Francisco Environment Code, Section 1902

Any material that can be broken down into, or otherwise become part of, usable compost (e.g., soil-conditioning material) in a safe and timely manner as accepted in San Francisco's compostables collection program, such as food scraps, soiled paper and plant trimmings. Compostable materials can also include disposable plastic food service ware and bags if [labeled according to standards specified in the report].

Boulder Municipal Code, Chapter 2-1

Any organic material that will naturally degrade and that has been designated as compostable by city manager regulation.... "Compostable materials" may include without limitation:

- (1) Yard clippings, wood, branches, twigs, leaves and animal or vegetable based food scraps resulting from the preparation, cooking and serving of food;*
- (2) Organic material that has been generated by any residential or commercial source; and*

- (3) *Organic material that has been completely segregated from trash by the generator for the purpose of being composted or otherwise processed through natural degradation into soil amendment, fertilizer or mulch.”*

Requirements for Haulers to Collect

San Francisco Environment Code, Section 1906

- (a) *All collectors must appropriately designate the collection containers they provide to customers for source separation of recyclables, compostables and trash. The containers must:*
- (1) *Bear appropriate signage that allows users to clearly and easily identify which containers to use for recyclables, compostables or trash;*
 - (2) *Be color-coded—blue for recyclables, green for compostables and black for trash; and,*
 - (3) *Bear the name of the collector to whom the container belongs.”*

City of Boulder Municipal Code, Chapter 6-12-4

- (b) *Each hauler that provides residential trash collection shall provide for the collection of the following no less frequently than every other week:*
- (1) *Unlimited recyclables;*
 - (2) *A minimum of thirty-two gallons of compostables;*
 - (3) *Three paper or compostable bags of leaves; and*
 - (4) *Three bundles of branches no larger than three feet by six feet, tied by twine or compostable materials.*
- (c) *Bags and bundles of compostables shall be placed adjacent to the compost container on collection day. The collection of compostables and recyclables shall occur either curbside or in alleys, whichever the hauler utilizes for trash collection.*
- (d) *Each hauler shall provide each residential customer with a base unit of service which shall include a maximum of thirty-two gallons of trash collection service and which shall also include the collection of recyclables and compostables consistent with subparagraphs (b) and (c) above.”*

Another provision in this Chapter allows haulers to charge for additional service as long as the fee is lower than for refuse collection so to ensure a financial incentive to residential customers.

Haulers may charge for compostables collection in excess of that set forth in subparagraph (b) above at a rate of no more than seventy-five percent of an equivalent volume of trash service.”

Requirement to Separate

San Francisco Environment Code, Section 1903

All persons in San Francisco must source separate their refuse into recyclables, compostables and trash, and place each type of refuse in a separate container designated for disposal of that type of refuse. No person may mix recyclables, compostables or trash, or deposit refuse of one type in a collection container designated for another type of refuse, except as otherwise provided in this Chapter.

Requirement to Provide Containers

City of Boulder Municipal Code, Chapter 6-12-5

- (a) If the city manager requires the collection of compostables, haulers shall provide containers for that service of a sufficient size to accommodate the regular accumulation of compostables from that customer.*
- (b) Haulers providing trash collection service to residential customers are not required to provide recyclables or compostables containers. However, if the hauler requires a specific type of container, then the hauler shall deliver such container at no cost to the residential customer.*

Disposition of Compostable Materials

City of Boulder Municipal Code, Chapter 6-12-6

- (d) Haulers shall take all compostable materials collected to a state permitted compost facility that can certify that the material is processed into a compost product. Haulers shall maintain receipts and records for a period of five years. Upon request by any customer or the city manager, haulers shall produce receipts from the facility utilized.*

Enforcement

San Francisco Environment Code, Section 1906

- (b) (1) If a collector finds materials that are not the correct type as designated for that container, such as recyclables or compostables in a trash container, or trash in a compostables or recyclables container, the collector then must leave a tag on the container identifying the incorrect materials.*
- (2) If the collector continues to find incorrect materials in a collection container after the collector has left a previous tag for that customer and that type of container, the collector must leave another tag on the container identifying the incorrect materials and send a written notice to the person who subscribes for that collection service.*

Penalties

San Francisco Environment Code, Section 1906

- (b) (3) *If the collector continues to find incorrect materials in a collection container after the collector has already left two or more tags for that customer and that type of container, the collector may refuse to empty the container, subject to California Code of Regulations Title 14, Section 17331, or as determined by the Director of Public Health or his or her designee. If the container is not emptied, the collector must leave a tag and send a written notice to the person who subscribes for the collection service, identifying the incorrect materials and describing what action must be taken for the materials to be collected; provided, however, that a collector may not refuse on this basis to empty containers from multifamily or commercial properties with multiple tenants and joint account collection service.*
- (4) *The collector shall, upon request, provide to the Director a list of the names and addresses of those persons who have received tags or notices or whose containers have not been emptied due to non-compliance with this Chapter, or copies of the tags or notices issued by the collector. The collector shall also provide to the Director, upon request, a list of the names, addresses, and service levels of the collector's customers and any additional information required by the Director.*

Exemptions

San Francisco Environment Code, Section 1906

- (d) *No person may deliver recyclables or compostables, including those mixed with trash, to a landfill or transfer station for the purpose of having those materials landfilled, except as follows:*
- (1) *A collector may drop off recyclables or compostables at the San Francisco transfer station for landfill if the transfer station has agreed to provide to the Director, upon request, audits of collection vehicles for a specified period going forward in time. The transfer station's audit shall report the quantity of recyclables or compostables, stated as estimated tons per load or as a percentage of the loads, deposited at the transfer station by collection vehicles specifically identified in the request over a reasonable period of time occurring after the request.*
- (2) *A processing facility that sorts and reconstitutes recyclables for the purpose of using the altered form in the manufacture of a new product or turns compostables into usable and marketable compost (e.g., soil-conditioning) material may send to a landfill a minor portion of those materials that constitutes unmarketable processing residuals, if the processing facility provides to the Director, upon request, audits of specific collection vehicles for a specific period going forward in time, of the quantities of recyclables or compostables sent to the landfill from the processing facility.*

City of Boulder Municipal Code, Chapter 6-12

The following persons are exempt from the provisions of this chapter:

- (a) Any person who transports only the trash which that person generates.*
- (b) A property owner or agent thereof who transports trash, recyclables or compostables left upon such owner's property, so long as such property owner does not provide such collection service for compensation for tenants on a regular or continuing basis.*
- (c) Landscaping contractors that produce and transport trash, recyclables or compostables in the course of their occupations where the production of trash, recyclables or compostables is merely incidental to the particular landscaping work being performed by the contractors.*
- (d) Any person who transports only liquid wastes (including, without limitation, sewage, sewage sludge, septic tank or cesspool pumpings), discarded or abandoned vehicles or parts thereof, discarded home or industrial appliances, materials used as fertilizers or for other productive purposes, household hazardous wastes and hazardous materials as defined in the rules and regulations adopted pursuant to the United States Hazardous Materials Transportation Act, 49 U.S.C. § 5101, et seq.*

Reporting

San Francisco Environment Code, Section 1906

- (c) Within 90 days of the end of each calendar year, each collector must submit to the Department, on a form specified by the Director, an annual report of all tons collected by material type and to whom the material was sent.*

City of Boulder Municipal Code, Chapter 6-12-4

- (a) Each hauler shall submit an annual report to the city manager of the weight in tons of trash, recyclables and compostables collected by commodity within the city. For loads that contain trash, recyclables or compostables originating in part from within the city, and in part from outside the city, the reported quantity may be estimated by the hauler. Reports shall be submitted for each year by January 31 of the succeeding year using forms provided by the city manager. All information that is confidential pursuant to the provisions of the Colorado Open Records Act, § 24-72-201, et seq., C.R.S., shall be treated as such.*

City of Boulder Municipal Code, Chapter 6-12-4

- (e) Haulers providing trash collection service to multifamily customers shall also provide collection service of all their recyclables at no additional charge beyond that agreed for trash collection service. The city manager may require each hauler that is providing trash and recyclables collection to multifamily customers to also provide compostables collection.*

- (f) Nothing in this section shall be construed as prohibiting any hauler from establishing rules regarding safety. Haulers may also set special pricing for large or unusual items.*

In summary, these two cities have two of the most well-established requirements for collecting source separated organics from residents but use very different approaches. The City of San Francisco places the majority of the compliance burden on the residents. Residents are penalized if they place organics in the container with refuse. Boulder places the lion's share of the burden for compliance on the private haulers. To operate in the City, private haulers must offer separate organics collection to their customers on a defined schedule and comply with a rate structure that encourages participation. The excerpts from the municipal codes in this letter report provides specific examples of language that can be used in ordinances that take either of these approaches.

Section 8

Sample Customer Surveys

Pre-Pilot Survey Cover Letter

Dear Resident,

(Enter name of local government) is striving to become a “best in class” city, and sees environmental sustainability as a key element to achieving “best in class” status. To that end, (enter name of local government) is considering an exciting new program to recycle residential organic waste. Organic waste, such as food scraps and yard trimmings, can be turned into valuable resources to fertilize and amend soil. If this program is implemented City(or County) wide, we estimate that an additional 14 percent of the solid waste generated by residents could be diverted from landfills.

To assist us in planning a program that works for you, we request that you participate in the following survey about organic waste generation and management in your household. Your household’s information will not be shared, except in summary format.

If you have any questions about the survey or our future plans, please call (enter phone number) or email (enter e-mail address).

Thank you in advance for participating in our source-separated organics survey.

Sincerely,

_____(name)

_____(title)

Pre-Pilot Survey

- 1) Please indicate the type of home you live in:
 - a. Single-family home (include condominiums and townhomes, but not apartments)
 - b. Multi-family home with fewer than five units
 - c. Multi-family home with greater than five units
- 2) How many people live in your household? _____
- 3) How many meals per week, on average, do you prepare at home? _____
- 4) Do you currently participate in the City's curbside recycling program regularly (at least every other week)?
 - ☐ Yes
 - ☐ No
- 5) If not, why not? (check all that apply)
 - ☐ I don't know how to participate
 - ☐ I don't have time to prepare recyclables
 - ☐ I do not have a recycling container
 - ☐ I find it inconvenient to bring recyclables to the curb (or recycling container, for multi-family residents)
 - ☐ Other _____
- 6) What motivates you to recycle? (Check all that apply)
 - ☐ It frees up space in my garbage container(s)
 - ☐ It's good for the environment
 - ☐ It puts materials to good use
 - ☐ It reduces the cost of my garbage collection
 - ☐ Other: _____
- 7) What quantity of garbage (to be disposed) do you generate weekly?
 - a. Size of container: _____ gallons
 - b. Number of containers set out per week: _____
 - c. On average, each container is _____% full.

- 8) How do you manage **yard trimmings** from your residence (grass trimmings, leaves, and brush)?

For each management option, indicate how much of your yard trimmings you manage this way.

	None (0%-10%)	Some (10-40%)	About Half (40-60%)	Most (60-95%)	All (95 - 100%)
Compost at home	☐	☐	☐	☐	☐
Leave yard trimmings/leaves in woods, on lawn, or other areas of yard to decompose	☐	☐	☐	☐	☐
Set yard trimmings at curb for City's yard waste collection	☐	☐	☐	☐	☐
Take yard trimmings to drop-off site/transfer station for recycling	☐	☐	☐	☐	☐
Hauled away by yard maintenance business.	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

- 9) If you answered "other" regarding managing **yard trimmings** in Question 8, how do you manage them? _____

- 10) If you take **yard trimmings** to a drop-off site/transfer station for processing, please indicate how many trips you make each season, and approximately how many 32-gallon bags (or equivalent) you deliver, on average, each trip.

	Spring	Fall	Summer	Winter
Number of Trips in Season				
Average Number of 32-Gallon Bags per Trip				

Section 8

- 11) How do you manage **vegetative food scraps** from your residence? For each management option, indicate how much of your vegetative food scraps you manage this way.

	None (0%-10%)	Some (10-40%)	About Half (40-60%)	Most (60-95%)	All (95-100%)
Throw away in the garbage with other household waste.	☐	☐	☐	☐	☐
Throw away in the garbage, but separately from other household waste.	☐	☐	☐	☐	☐
Throw away in garbage disposal.	☐	☐	☐	☐	☐
Compost vegetative food scraps at home.	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

- 12) If you answered “other” in question 11, please indicate how you manage **vegetative food scraps**: _____

- 13) How do you manage **meat and dairy food scraps** from your residence? For each management option, indicate how much of your **meat and dairy food scraps** you manage this way.

	None (0%-10%)	Some (10-40%)	About Half (40-60%)	Most (60-95%)	All (95-100%)
Throw away in the garbage with other household waste.	☐	☐	☐	☐	☐
Throw away in the garbage, but separately from other household waste.	☐	☐	☐	☐	☐
Throw away in garbage disposal.	☐	☐	☐	☐	☐
Compost meat and dairy food scraps at home.	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

- 14) If you answered “other” in question 13 please indicate how you manage **meat and dairy food scraps**: _____

15) If the City were to implement a source separated compost program for all organics, including food scraps, would you participate?

- ☐ Yes
- ☐ No
- ☐ Not Sure

16) If you answered “No” or “Not Sure” in Question 15, please indicate your concerns: (check all that apply)

- ☐ Lack of time for separating organic waste
 - ☐ Lack of space for storing separated organic waste
 - ☐ Concerns about cleaning storage container
 - ☐ Odors from separated organic waste
 - ☐ General public health issues, like food borne illness
 - ☐ Household pests attracted to organic waste stored indoors
 - ☐ Pests and animals attracted to organic waste stored outdoors
 - ☐ I am currently composting food waste
 - ☐ I am currently putting food waste in my garbage disposal unit in the sink
 - ☐ I do not see any benefits of separating organic waste
 - ☐ Other:
-

17) If you were to participate in the source separated organics program, how often do you think you would need the other household garbage to be collected?

- ☐ Weekly
- ☐ Every other week
- ☐ Monthly
- ☐ Other:_____

18) In which quadrant of the City do you live? ([City map](#) is available online)

- ☐ Northeast (Collection day is Monday)
- ☐ Southeast (Collection day is Tuesday)
- ☐ Southwest (Collection day is Wednesday)
- ☐ Northwest (Collection day is Thursday)

19) Do you own your own home?

- ☐ Yes
- ☐ No

20) What range describes your family annual income?

- ☐ Less than \$10,000
- ☐ \$10,000 to \$24,000
- ☐ \$25,000 to \$49,000
- ☐ \$50,000 to \$74,000
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 or greater

21) What is the highest level of education you or another adult in the household has completed?

- ☐ Some high school
- ☐ High school graduate
- ☐ Some college
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctoral Degree
- ☐ Other

22) How did you learn about this survey? (check all that apply)

- ☐ Newspaper
- ☐ Word of mouth
- ☐ Radio
- ☐ City press release
- ☐ City Web site
- ☐ Other: _____

23) Please let us know if you have any comments, concerns or suggestions about the City's waste management practices. _____

Thank you again for participating in this survey.

Post-Pilot Survey Cover Letter

Dear Resident,

Your neighborhood was recently selected to participate in a source-separated organics collection pilot program. The (enter City/County name) strives to become a “best in class” city, and believes achieving environmental sustainability is critical to achieving “best in class” status. Toward that end, (enter City/County name) is considering implementing a source-separated organics collection program Citywide. The pilot program was being conducted to learn about program operations and residents’ attitudes and behaviors regarding source-separated organics.

We would greatly appreciate your providing feedback via this brief survey about the pilot program in order that we can improve the program, as needed, before it is launched Citywide. Thank you in advance for your feedback, and your participation in the pilot program.

If you have any questions about the survey or our future plans, please call (enter phone number) or email (enter e-mail).

Sincerely,

_____ (name)

_____ (title)

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Section 9

Sample Fact Sheet and Public Information Documents

Sample Fact Sheet

This Fact Sheet included presumes a certain type of SSO Collection Program. The City, County, and other local governments across Georgia may choose different features than those represented here. For example, meat and dairy may not be included or carts may not be provided. The Fact Sheet is an *example* of the types of questions that a local government may want to answer in print and online to educate residents about the program.

Sample Fact Sheet for Source Separated Organics Program

The (City/County name) is implementing a residential source separated program for the collection of food scraps, which will be able to be collected separately from regular household garbage and composted, along with yard trimmings, into soil-enriching compost. This program, if fully utilized, will help ((City/County name) reduce the amount of waste disposed by about 14 percent. Similar programs have been successfully implemented in other cities. We are excited to offer this program to our residents, and appreciate your participation.

Q: Why is (City/County name) implementing this program?

A: The City can reduce garbage disposal costs by with full participation in this program. We see environmental sustainability as key to becoming a “best in class” city.

Q: What can be included in the program?

A: Residents are encouraged to include all food scraps. This includes meat and dairy, which are often not recommended for inclusion in backyard composting. Also, plate scrapings and spoiled food should be included – not just kitchen food scraps from food preparation. Food-soiled paper and cardboard (if not wax-coated) can also be included. Pet waste may also be included in the program.

Q: What cannot be included in the program?

A: Grease and oil cannot be included in your source-separated organics. Also, please be sure to keep contaminants out – such as non-paper food packaging made of plastic, glass, and foil. These materials can damage the processor’s equipment and impact the quality of the compost.

Q: What about odors?

A: Source separated organics will be collected weekly, as garbage is currently, so the program should not cause odor issues.

Q: What about animals and insects?

A: We ask that you place your food scraps in the cart, along with yard trimmings. If you generate more yard trimmings than will fit in the cart, please place those (but not food scraps) in a biodegradable bag beside your yard waste cart on setout day.

Q: When will source separated organics be collected?

A: On the same day as your garbage and recyclables are currently collected.

Q: What if I set out my organics in plastic bags instead of the container provided?

A: Your hauler will not collect your cart. Please only use the specified biodegradable bags.

Sample Introduction Letter for Pilot Source Separated Organics Program

August 4, 2011

Subject: **Residential Source Separated Organics Collection Pilot Project**

Dear (City/County) Resident:

The (City/County) is striving to become a “best in class” city. Our (City/County) has initiated many sustainability initiatives which are critical to reaching this status. Responsibly managing the waste we generate is an important way we can all contribute to the (City/County’s) sustainability.

I am pleased to announce that your household has been selected to participate in an exciting new environmentally friendly pilot collection program – the Residential Source Separated Organics Program Pilot. You will receive a rolling cart in which to place these materials within the next month.

The Residential Source Separated Organics Collection Pilot will be offered in your neighborhood from August 1 to December 1, 2012. This Pilot will help us test the feasibility of providing this new service that allows residents to include food scraps and pet waste in their yard trimmings carts, thus reducing the amount of garbage generated for disposal each week.

This pilot project is being funded and coordinated by the (City/County Department of Solid Waste). You will be receiving information about the program, as well as a new yard trimmings cart the week of July 25 – 31. Please review the instructions included with your new collection containers. Staff is committed to making this collection Pilot work for customers. Throughout the duration of the Pilot, staff will be available to answer questions, accept comments, and respond to any concerns you might have. Please call the source separated organics (SSO) hotline at (enter phone number) or email at (enter e-mail)

Thank you in advance for participating in this program. I look forward to a successful Source Separated Organics Collection Pilot Project, and appreciate your efforts to help make (City/County name) a more sustainable (City/County)

Sincerely,

Mayor

Sample Introduction Letter for (City/County)-Wide Source Separated Organics Program

August 4, 2011

Subject: **Residential Source Separated Organics Collection Project**

Dear (City/County) Resident:

The (City/County) is striving to become a “best in class” (City/County), implementing many sustainability initiatives which are critical to reaching this status. Responsibly managing the waste we generate is an important way we can all contribute to the (City/County’s) sustainability.

I am pleased to announce that the (City/County) is introducing an exciting new environmentally friendly program – the Residential Source Separated Organics Collection Program on December 1, 2012. This program will allow you to put organic materials, such as yard trimmings and food scraps in the organics cart, thus reducing the amount of garbage generated for disposal each week.

You will be receiving information about the program, as well as a new cart to store these materials the week of November 21 – 25. Please review the instructions included with your new collection containers. Staff is committed to making this collection program work for customers. Staff are available to answer questions, accept comments, and respond to any concerns you might have. Please call the source separated organics (SSO) hotline at (enter your phone number) or email at (enter your e-mail).

Thank you in advance for participating in this program. I look forward to a successful outcome, and appreciate your efforts to help make (name of City or County) a more sustainable (City/County).

Sincerely,

Mayor

Links to Samples of Public Education and Information Regarding Residential SSO Collection Programs

Alameda County, California (www.StopWaste.Org)

General Information about Residential Curbside Food Scrap Collection and Links to Additional Outreach Materials (including those for municipalities within Alameda County)

<http://www.stopwaste.org/home/index.asp?page=528>

Barrington, Illinois

General Information on residential curbside composting program on Solid Waste Association of Northern Cook County web site.

<http://www.swancc.org/foodwastefaq.html>

Berkeley, California

General information about how to prepare food scraps for curbside collection.

http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=5606#FOOD_SCRAPS

Boulder, Colorado

General information on residential recycling and composting programs.

http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=1324&Itemid=450

In-depth information on residential recycling and composting programs

http://www.bouldercolorado.gov/files/411_on_curbside_compost.pdf

Cambridge, Massachusetts

General information about residential drop-off program for food scraps.

<http://www.cambridgema.gov/theworks/ourservices/recyclingandtrash/faqrecyclinganddrubbish/compostingquestions/organicsdropofffaq.aspx>

Hutchinson, Minnesota

General information about residential curbside food scrap collection program.

<http://www.ci.hutchinson.mn.us/composting.html#curbside>

King County, Washington

General information about residential curbside food scraps collection program.

<http://your.kingcounty.gov/solidwaste/garbage-recycling/food-collection.asp>

Livermore, California

Pamphlet on how to prepare food scraps for curbside collection.

<http://www.stopwaste.org/docs/livermore.pdf>

Portland, Oregon

Announcement of new residential curbside food scrap collection program.

<http://www.portlandonline.com/bps/index.cfm?c=52380>

General information about residential curbside food scraps collection program.

<http://www.portlandonline.com/bps/index.cfm?c=52380&a=359549>

San Francisco, California

General information of residential curbside compost program on hauler website. Includes a compost flyer in Spanish and Chinese.

<http://sunsetscavenger.com/residentialCompost.htm>

Section 10

Sample Reporting Documents

Sample Hauler Reporting Documents for a SSO Curbside Program

Section I. Company Information

Corporate Name	
Hauler Permit ID Number	
Business Name (DBA)	
Street Address	
City, State, Zip	
Contact Name	
Contact Phone Number	
Fax Number	
Contact E-Mail Address	
Business License Nbr.	

Reporting Period: From _____ to _____

Section II. Account and Tonnage Collected Information

CUSTOMER TYPE	COMPOSTED MATERIALS			
	Source Separated Organics		Yard Trimmings Only	
	# Customers	Tons Collected	# Customers	Tons Collected
Single-Family Residential				
Multi-Family Residential				
Commercial/Industrial/Institutional				
TOTAL				

Section III. Destination

RECEIVING FACILITIES (Indicate facility name and location)	FACILITY TYPE (MSW landfill, transfer station, C&D landfill, inert landfill, organics processing facility, other)	Tons of Source Separated Organics Collected	Tons of Yard Trimmings Only Collected
TOTAL			

Organics processing facilities include wood grinding facilities and composting facilities.
Please identify "other"

Section 11

Collection Vehicles and Containers

Collection Vehicles

Generally, the options for residential SSO collection vehicles are similar to those used to collect municipal solid waste, as indicated in the Table below. The vehicles selected must be compatible with containers/carts used by residents and otherwise take into account the needs of waste generators (size constraints, weight constraints, etc.). Some vehicle types are available with split bodies, which allow for the collection of two separate waste streams at one stop.

Typical Vehicle Types Used to Collection SSOs

Vehicle Type	Typical Price Range	Considerations
Rear-loading vehicle	\$160,000 - \$180,000	▪ Compatible with both manual and semi-automated collection ▪ Compatible with bags, carts (if tippers used) or cans ▪ Flexible use – can often be used to collect other types of materials ▪ No swinging arm that may get hit on wires, trees ▪ Collector has opportunity to visually inspect contents before tipping into vehicle ▪ Compatible with brush piles ▪ Less efficient collection ▪ Workers must exit vehicle to collect – can increase injuries, make job less appealing
Automated side-loading vehicle	\$200,000 - \$215,000	▪ Compatible with carts. ▪ Relatively efficient collection ▪ Workers can collect from inside vehicle, decreasing risk of injury and making job more appealing ▪ Typically not compatible with bags or cans. ▪ Not compatible with brush piles
Front-loading vehicle	\$180,000 - \$200,000	▪ Compatible with dumpsters and compactors of various sizes ▪ Not generally compatible with bags, cans and carts (unless they are first tipped into the front-loading vehicle) ▪ Hydraulic lift requires overhead clearance ▪ Tipping process is relatively slow, not designed for large numbers of small-scale waste generators ▪ Not compatible with loose brush piles

Collection Containers

Many communities use wheeled lidded carts for the collection of source separated organics. However, because source separated organics can be heavier than municipal solid waste and because they are only a fraction of a resident's total waste, SSO containers are typically smaller than the 65 to 95 gallon size used for residential municipal solid waste. Some communities promote the use of biodegradable bags, either in lieu of carts or to put into resident-owned cans.

Some communities distribute containers, or pails, to keep inside to store small amounts of food waste in the kitchen before transporting to an outdoor cart or can. Some local governments allow the use of biodegradable liners in kitchen pails while others may encourage residents to use biodegradable/compostable containers (such as cartons, aseptic containers or cardboard ice cream containers) as containers for their compostable kitchen scraps.

Some considerations when selecting appropriate containers include:

- The type of vehicle to be used;
- Residential space limitations
- Frequency of collection;
- Weight limitation of containers;
- Types, weight, and volume of material expected; and
- Environmental factors (freezing temperatures, wind, hills, overhead trees and utility lines, etc.).

The Table below summarizes container types, approximate costs, and typical features of these containers.

Typical Exterior and Interior SSO Collection Containers

Container Type	Approximate Cost	Typical Features
Curbside Collection Can	\$30 - \$35	- Purchased by homeowner - Easy to replace - Can be bulky/cumbersome to move, especially if SSO are dense - Compatible with manual collection only.
Wheeled Curbside Collection Cart	\$40 - \$60	- Compatible with automatic or semi-automatic collection - Typically available in 36-, 64-, and 96-gallon sizes. However, most SSO programs use 12-, 36- or 64- gallons as 96-gallon becomes too heavy. - Usually purchased by local government or hauler. Some communities have residents pay for cart initially, or pay for extra cart. - Can have an RFID tag to identify household to which assigned. - Many local governments also purchase a service contract - Can be customized to have local government seal, etc. - Some have special venting for SSOs. - Many are aerated (either on the lid or at the bottom) to increase airflow
Curbside Collection Bags	\$0.50 - \$2.50	- Some programs allow SSO to be placed in biodegradable or compostable bags - Bags may be made of Kraft paper or biodegradable or compostable plastic - Not all Kraft bags may hold up to food waste with high moisture content, however two-ply Kraft bags are available which have wet strength. - In many communities bags must be approved by the local government – to ensure acceptability by composting facility - Typically bags are placed inside carts or cans. - Can be compatible with all types of collection, depending on whether cart or can used. Alone, only compatible with manual collection.
Kitchen Pails  Source: www.norsemanplastics.com	\$3.00 - \$5.00	- Often provided at no charge to residents. - Usually 1 – 2 gallons in size - Some have a sealable lid to mitigate odors and insects. - Some communities advise residents to use their own “containers” such as compostable cartons, aseptic containers, or ice cream containers.
Kitchen Pail Liners		- Some programs allow liners, others do not. - Options for lining include: biodegradable plastic, newspaper, or brown paper bags.

Sources for Collection Containers

Note: Listing herein does not constitute an endorsement for the products below.

Bag and Tag – Supplier of paper and plastic bags for yard trimmings and food waste
<http://bagandtag.com/paper-yard-waste-bags.html>

Bio-Bag – manufacturer of compostable bags
<http://www.biobagusa.com/>

Busch Systems – manufacturer of kitchen compost containers
www.buschsystems.com/

Eco-Products – retailer of compostable/biodegradable bags
<http://www.ecoproducts.com/>

Natur-Tec – manufacturer of compostable plastic bags
http://www.natur-tec.com/pdf/Natur-Tec_General_Product_Sheet.pdf

Norseman Environmental Products – manufacturer of carts and countertop containers
www.norsemanplastics.com/

Otto Environmental Systems – manufacturer of carts and kitchen compost containers
www.otto-usa.com/en/default.php

Rehrig Pacific – manufacturer of carts and countertop containers
www.rehrigpacific.com/products/rollout_carts_61d.aspx

SSI-Schaefer – manufacturer of carts
www.ssi-schaefer.ca/WR/WRproAP.html

Toter – manufacturer of carts
www.toter.com

Webster, Inc. – manufacturer of compostable bags
<http://www.websterindustries.com/>

Section 12

Organics Processing Facilities in EPA Region 4

The following links identify the organics processing facilities in EPA Region 4. In addition, this section identifies the State agency to contact for assistance with identifying organics processing facilities.

Alabama

ADEM Solid Waste Branch

(334) 271-7764

<http://www.adem.state.al.us/programs/land/default.cnt>

Florida

Department of Environmental Protection Division of Waste Management

(850) 245-8705

http://appprod.dep.state.fl.us/WWW_WACS/Reports/SW_Facility_Inventory_srch.asp

Georgia

Environmental Protection Division

(404)657-5947

http://www.georgiaepd.org/Documents/swp_map02.html

Kentucky

Department for Environmental Protection Division of Waste Management

(502) 564-6716

<http://waste.ky.gov/Pages/default.aspx>

Mississippi

Department of Environmental Quality Solid Waste Policy, Planning, and Grants Branch

(601)961-5171

http://www.deq.state.ms.us/MDEQ.nsf/page/SW_General_Solid_Waste_Guidance?OpenDocument

2011 is located at

[http://www.deq.state.ms.us/MDEQ.nsf/pdf/SW_ActiveFacilityListing/\\$File/ActiveFacilityListing.pdf?OpenElement](http://www.deq.state.ms.us/MDEQ.nsf/pdf/SW_ActiveFacilityListing/$File/ActiveFacilityListing.pdf?OpenElement)

North Carolina

Division of Waste Management

(919)508-8400

<http://portal.ncdenr.org/web/wm/sw/facilitylist>

South Carolina

South Carolina Department of Health and Environmental Control Land and Waste Management

(803) 896-4000

http://www.scdhec.gov/environment/lwm/Databases/MSWM/Mine-SW_search.htm

Tennessee

Department of Environment & Conservation Solid Waste Management

(615) 532-0780

<http://www.tn.gov/environment/swm/pdf/swfacilities.pdf>

Section 13

State Waste Composition Studies in EPA Region 4

In order to gain a better understanding of the potential diversion that could be achieved through a residential SSO collection program, the following links to federal, state, and local waste composition data are provided.

U.S. EPA Waste Composition Study

Municipal Solid Waste in the U.S. – Facts and Figures (2009)

<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>

Municipal Solid Waste in the U.S. – Report (2009)

<http://www.epa.gov/osw/nonhaz/municipal/pubs/msw2009rpt.pdf>

Georgia Statewide Waste Composition Study (2005)

<http://www.dca.state.ga.us/development/EnvironmentalManagement/publications/GeorgiaMSWCharacterizationStudy.pdf>

Florida Statewide Waste Composition Computer Model (2003)

http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/InnovativeGrants/IGyear3/finalreports/WasteCalcFinalReport.pdf

Orange County, NC Waste Sort Results (2010)

http://orangecountync.gov/recycling/documents/WasteSort2010/Multifamily_composition.pdf

http://www.orangecountync.gov/recycling/documents/WasteSort2010/Residential_composition.pdf

South Carolina Annual Report (2010)

<http://www.scdhec.gov/environment/lwm/recycle/pubs/section3.pdf>

Tennessee Statewide Waste Characterization Study (2008)

<http://www.tn.gov/environment/swm/pdf/swspfin1.pdf>

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