



RAMSEY/WASHINGTON COUNTY
RESOURCE RECOVERY PROJECT

2785 White Bear Avenue • Suite 350 • Maplewood, Minnesota 55109 • 651.266.1194 • 651.266.1177

MEETING NOTICE

**RAMSEY/WASHINGTON COUNTY
RESOURCE RECOVERY PROJECT BOARD MEETING**

DATE: April 28, 2011

TIME: 9:00 a.m. -- Noon

PLACE: Resource Recovery Project/Ramsey County Environmental Health Offices
2785 White Bear Avenue, Suite 350
Maplewood, MN 55109

AGENDA:

- I. **CALL TO ORDER**
 - II. **APPROVAL OF AGENDA**
 - III. **APPROVAL OF MINUTES – January 27, 2011**
 - IV. **BUSINESS**
 - A. Administration
 1. Monthly Report of Budget Activity Information
 - B. Policy
 1. Continued Joint County Organic Waste Discussion Information
- Break
2. Panel: Industry Perspectives on Commercial Organic Waste Management Information
 3. Staff Updates Information
 - a. Regional Solid Waste Planning
- V. **OTHER BUSINESS**

Upcoming Meetings

- May 26, 2011 – 2012 Budget Committee Meeting
(**Budget Committee:** Janice Rettman, Toni Carter, Lisa Weik)
- June 23, 2011 – Resource Recovery Project Board, 9:00 am

**RAMSEY/WASHINGTON COUNTY
RESOURCE RECOVERY PROJECT BOARD
JANUARY 27, 2011
MINUTES**

A meeting of the Ramsey/Washington County Resource Recovery Project was held at 9:00 a.m., January 27, 2011 at the St. Paul - Ramsey County Department of Public Health, Environmental Health Section, Maplewood, Minnesota.

MEMBERS PRESENT

Commissioners Toni Carter, Jan Parker, Victoria Reinhardt, Janice Rettman – Ramsey County
Commissioners Dennis Hegberg, Gary Kriesel, Lisa Weik – Washington County

MEMBERS ABSENT

Commissioner Rafael Ortega – Ramsey County
Commissioner Bill Pulkrabek – Washington County

ALSO ATTENDING

Peter Barthold, Mary Elizabeth Berglund, Gary Bruns, Zack Hansen, Judy Hunter, Kevin Johnson, Curtis Johnson, Lowell Johnson, Susan Kuss, Trudy Richter, Norm Schiferl, Katie Shaw, John Springman, Warren Shuros, Jodi Taitt

APPROVAL OF AGENDA

Commissioner Parker moved, seconded by Commissioner Weik, to approve agenda.

Roll Call: Ayes – 6 Nays – 0 Motion Carried.

APPROVAL OF THE MAY 27, 2010 MINUTES

Commissioner Hegberg moved, seconded by Commissioner Parker, to approve the minutes.

Roll Call: Ayes – 6 Nays – 0 Motion Carried.

Introductions were made.

SECTION A: BUSINESS - GOVERNANCE

Election of Officers

Chair Reinhardt asked for nominations for the position of Project Board Chair. Commissioner Kriesel nominated, seconded by Commissioner Weik, Commissioner Hegberg for Chair. Commissioner Reinhardt moved to close nominations and elect Commissioner Hegberg as Chair of the Project Board.

Roll Call: Ayes – 6 Nays – 0 Motion Carried.

Commissioner Hegberg took the Chair and asked for nominations for Vice Chair. Commissioner Parker nominated Commissioner Reinhardt for Vice Chair. Hearing no other nominations, Commissioner Reinhardt was elected Vice Chair.

Roll Call: Ayes – 6 Nays – 0 Motion Carried.

Commissioner Toni Carter arrived.

Appointment of Executive Committee

Chair Hegberg said the Executive Committee is composed of the Chair, Vice Chair, and a member of the Vice Chair's County. Chair Hegberg appointed Commissioner Parker to serve on the Executive Committee. The Executive Committee appointees are Commissioners Hegberg, Reinhardt, and Parker.

Appointment of 2012 Budget Committee

Chair Hegberg appointed Commissioners Carter, Rettman, and Weik to serve on the Budget Committee.

SECTION B: ADMINISTRATION

2010 Monthly Report of Budget Activity

Susan Kuss said the 2010 monthly disbursements are routine. There were no questions.

2011 Work Plan & Meeting Schedule

Commissioner Reinhardt moved, seconded by Commissioner Weik, to approve the proposed 2011 Project Work Plan and meeting schedule to date.

Roll Call: Ayes – 7 Nays – 0 Motion Carried.

SECTION C: POLICY

2010 RESOURCE RECOVERY PROJECT RESULTS REPORT

Judy Hunter summarized the 2010 Resource Recovery Project Results Report.

Staff Updates

Zack Hansen briefly updated the Project Board on solid waste policy changes, regional waste processing changes, and changes in the waste and the economy.

ORGANIC WASTE MANAGEMENT

Updates on Organic Waste Management

Judy Hunter provided an overview of source separated organics materials (SSOM) in Ramsey and Washington Counties. Since the Counties have worked together on organic waste in the past, staff are proposing a joint policy discussion on challenges and opportunities to work on organic waste management.

Policy Discussion: Organic Waste Management

Zack Hansen stated that staff have prepared for a joint policy discussion by the Project Board about organic waste management. Staff have developed some questions and information to assist the Project Board in giving policy direction to staff. Overall policy issues:

- How should Ramsey and Washington Counties approach organic waste management?
- To what extent should the counties work together?
- What range of alternatives do the counties have for organic waste management, implemented jointly or alone?

After much discussion, the Project Board agreed that they would like to work together. The Counties have been very successful without a strict regulatory approach. They would like to see an approach that meets the goals on getting the organics out of the waste stream, that focuses on education or technical assistance. There is strong support from the organics industry to keep the County Environmental Charge in place.

Staff will frame some issues and bring them back to the Project Board in April.

Commissioner Kriesel left the meeting.

Anaerobic Digestion Proposal: Sanimax and Saint Paul Port Authority

Zack Hansen stated that Sanimax, a company in South Saint Paul, has expressed interest in developing an anaerobic digester. Staff discussed this with the Executive Committee, which said that the staff should work on this jointly on analyzing the issue. Sanimax was looking for some type of action on financial commitment from the Counties, but they are having some land acquisition issues right now so this is being presented to the Commissioners for information.

Trudy Richter stated that the Saint Paul Port Authority has been analyzing the technical and financial feasibility of anaerobic digestion as a means to process organic waste and generate energy in the form of natural gas. They have sent a letter to Ramsey, Washington, Dakota, and Hennepin Counties seeking support for an anaerobic digestion project at Sanimax in South Saint Paul. They would like the Counties to allow Sanimax to utilize the private portion of the County's QECB energy bond allocation for renewable projects which is zero interest financing and indicate the County's willingness to negotiate a contract to support the delivery of organics to Sanimax.

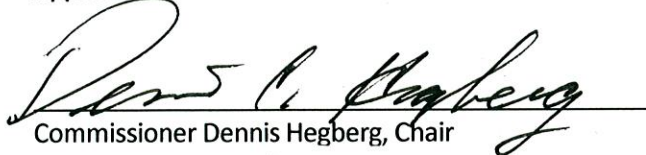
OTHER BUSINESS

Judy Hunter announced that Washington County has four Commissioners to the Resource Recovery Project Board per the Joint Powers Agreement. In the past, they have had three Commissioners from Washington County and one representative from Newport. Basil Loveland, Newport Representative, will no longer be appointed to the Project Board. He was unable to make it to the Project Board meeting and will be recognized for his 20 years of contribution to the Project Board at the April meeting.


ADJOURNMENT

Chair Hegberg adjourned the meeting.

Approved:


Commissioner Dennis Hegberg, Chair

RAMSEY/WASHINGTON COUNTY RESOURCE RECOVERY PROJECT
REQUEST FOR BOARD ACTION

BOARD MEETING DATE: <u>April 28, 2011</u> DATE SUBMITTED: <u>April 18, 2011</u>	
FROM: <u>Joint Staff Committee</u>	
<u>DOCUMENT DESCRIPTION:</u>	Report of Budget Activity 1) Budget Condition Report
<u>BACKGROUND:</u> The Resource Recovery Project Board requires that all invoice payments and Budget Adjustments be submitted for review.	
<u>PROJECT BOARD ACTION REQUESTED:</u> For information only.	
<u>FINANCIAL IMPLICATIONS OF ACTION:</u>	
<u>ADMINISTRATIVE COMMENTS:</u>	
<u>REVIEWED BY:</u>	
<u>Ramsey County Attorney</u> Date	 <u>Budgeting & Accounting</u> 4.18.11 Date
<u>Washington County Attorney</u> Date	

Report ID: GLS8020
 Bus. Unit: RC--Ramsey County
 Ledger Grp: ORG
 Currency : USD
 Chartfields Criteria
 Fund: 35101
 Project: All values

Dept: All values
 Budget Period: All values

R-A-M-S-E-Y C-O-U-N-T-Y A-S-P-E-N
 BUDGET STATUS REPORT

ORGANIZATION BUDGET LEDGER

Program: All values

Bud Ref: 2011

Account: All values

Page No. 1
 Run Date 04/18/2011
 Run Time 11:20:36

<u>Fund</u>	<u>Dept</u>	<u>Program</u>	<u>Bud Ref</u>	<u>Account</u>	<u>Budget</u>	<u>Assoc Revenue</u>	<u>PreEncumbrance</u>	<u>Encumbrance</u>	<u>Expense</u>	<u>PctExpd</u>	<u>Remaining</u>
<u>Project</u>		<u>Budget Period</u>									
Ramsey/Was - State Auditor											
35101	140101	00000	2011	421102							
		BY2011			5,520.00	0.00	0.00	0.00	0.00	0.00%	5,520.00
Ramsey/Was - Legal Services											
35101	140101	00000	2011	421201							
		BY2011			40,000.00	0.00	0.00	36,025.00	3,975.00	9.94%	0.00
Ramsey/Was - County Attorney Services											
35101	140101	00000	2011	421208							
		BY2011			13,946.00	0.00	0.00	0.00	114.75	0.82%	13,831.25
Ramsey/Was - Consulting Services											
35101	140101	00000	2011	421501							
		BY2011			1,500.00	0.00	0.00	1,125.00	375.00	25.00%	0.00
Ramsey/Was - Engineering Service											
35101	140101	00000	2011	421502							
		BY2011			95,000.00	0.00	0.00	70,670.45	24,329.55	25.61%	0.00
Ramsey/Was - Co Project Management Svcs											
35101	140101	00000	2011	421511							
		BY2011			273,037.00	0.00	0.00	0.00	8,383.91	3.07%	264,653.09
Ramsey/Was - Other Professional Services											
35101	140101	00000	2011	421522							
		BY2011			0.00	0.00	0.00	0.00	0.00	0.00%	0.00
Ramsey/Was - Advertising & Promotion											
35101	140101	00000	2011	421602							
		BY2011			302,000.00	0.00	6,589.73	3,402.25	149,062.30	49.36%	142,945.72

Report ID: GLS8020
 Bus. Unit: RC--Ramsey County
 Ledger Grp: ORG
 Currency : USD
 Chartfields Criteria
 Fund: 35101
 Project: All values

Dept: All values
 Budget Period: All values

R-A-M-S-E-Y C-O-U-N-T-Y A-S-P-E-N
 BUDGET STATUS REPORT

ORGANIZATION BUDGET LEDGER

Program: All values

Bud Ref: 2011

Account: All values

Page No. 2
 Run Date 04/18/2011
 Run Time 11:20:36

<u>Fund</u>	<u>Dept</u>	<u>Program</u>	<u>Bud Ref</u>	<u>Account</u>	<u>Budget</u>	<u>Assoc Revenue</u>	<u>PreEncumbrance</u>	<u>Encumbrance</u>	<u>Expense</u>	<u>PctExpd</u>	<u>Remaining</u>
<u>Project</u>		<u>Budget Period</u>									
Ramsey/Was - Equipment & Machinery Repairs											
35101	140101	00000	2011	422601							
		BY2011			0.00	0.00	0.00	0.00	0.00	0.00%	0.00
Ramsey/Was - Records Storage/Retriev Fees											
35101	140101	00000	2011	423309							
		BY2011			500.00	0.00	0.00	134.10	44.70	8.94%	321.20
Ramsey/Was - Liability & Property Damage											
35101	140101	00000	2011	424107							
		BY2011			25,664.00	0.00	0.00	0.00	18,128.00	70.64%	7,536.00
Ramsey/Was - Membership & Dues											
35101	140101	00000	2011	424302							
		BY2011			750.00	0.00	0.00	0.00	750.00	100.00%	0.00
Ramsey/Was - Other Travel											
35101	140101	00000	2011	424304							
		BY2011			3,000.00	0.00	0.00	0.00	0.00	0.00%	3,000.00
Ramsey/Was - County Manager Meeting Expense											
35101	140101	00000	2011	424306							
		BY2011			300.00	0.00	0.00	0.00	17.08	5.69%	282.92
Ramsey/Was - Other Services											
35101	140101	00000	2011	424601							
		BY2011			100,000.00	0.00	0.00	40,078.15	19,921.85	19.92%	40,000.00
Ramsey/Was - Per Diem Fee											
35101	140101	00000	2011	424608							
		BY2011			0.00	0.00	0.00	0.00	0.00	0.00%	0.00

Report ID: GLS8020
 Bus. Unit: RC--Ramsey County
 Ledger Grp: ORG
 Currency : USD
 Chartfields Criteria
 Fund: 35101
 Project: All values

R-A-M-S-E-Y C-O-U-N-T-Y A-S-P-E-N
 BUDGET STATUS REPORT

Page No. 3
 Run Date 04/18/2011
 Run Time 11:22:14

ORGANIZATION BUDGET LEDGER

Dept: All values
 Budget Period: All values

Program: All values

Bud Ref: 2011

Account: All values

<u>Fund</u>	<u>Dept</u>	<u>Program</u>	<u>Bud Ref</u>	<u>Account</u>	<u>Budget</u>	<u>Assoc Revenue</u>	<u>PreEncumbrance</u>	<u>Encumbrance</u>	<u>Expense</u>	<u>PctExpd</u>	<u>Remaining</u>
<u>Project</u>		<u>Budget Period</u>									
Ramsey/Was - Books Periodicals & Subscriptn											
35101	140101	00000	2011	424620							
		BY2011			0.00	0.00	0.00	0.00	0.00	0.00%	0.00
		Subtotal for Dept 140101 :			861,217.00	0.00	6,589.73	151,434.95	225,102.14	26.14%	478,090.18
Ramsey/Was - Resource Recovery Service Fee											
35101	140102	00000	2011	422306							
		BY2011			5,250,000.00	0.00	0.00	0.00	973,070.85	18.53%	4,276,929.15
Ramsey/Was - Rebates-Res Rec Tipping Fees											
35101	140102	00000	2011	424623							
		BY2011			4,900,000.00	0.00	0.00	0.00	673,276.82	13.74%	4,226,723.18
Ramsey/Was - Subsidies to Other Entities											
35101	140102	00000	2011	425102							
		BY2011			650,000.00	0.00	0.00	0.00	0.00	0.00%	650,000.00
		Subtotal for Dept 140102 :			10,800,000.00	0.00	0.00	0.00	1,646,347.67	15.24%	9,153,652.33
		Subtotal for Fund 35101 :			11,661,217.00	0.00	6,589.73	151,434.95	1,871,449.81	16.05%	9,631,742.51
		Grand Total :			11,661,217.00	0.00	6,589.73	151,434.95	1,871,449.81	16.05%	9,631,742.51

End of Report



April 21, 2011

To: Ramsey/Washington County Resource Recovery Project Board
From: Staff
Re: Joint Policy Discussion on Commercial Organic Waste Management

The Resource Recovery Project has been a forum for the counties to work together on organic waste management for over 6 years. At its January, 2011 meeting, the Project Board began a policy discussion about continued joint work on organic waste management. Some background information was presented at that time in order for Board members to gain more understanding about organic waste. The Project Board provided additional direction to staff which leads to the discussion at the April Project Board meeting. Please note that the work being carried out by staff focuses on organic waste generated by commercial entities; work on residential organics will proceed in joint discussions with the counties and SWMCB.

This documentation is a follow up to the January Project Board direction and

1. Reviews the Board direction from January;
2. Outlines additional information gathered to assist commissioners in the policy discussion; and
3. Presents further information about strategies the Project could take.

The staff presentation of this information will be followed by further Board discussion, as well as a panel of industry representatives who will be asked to give their perspectives on the issue.

Summary of Policy Discussion and Direction to Date

At the January meeting staff framed the policy issues around organic waste to facilitate the Board's discussion on the issue. A flow chart and matrix suggested a progression of decisions for the Project Board to consider. As a result of that discussion, the following direction was provided to staff:

1. **Joint Project Approach:** The Project Board indicated its interest in having the two counties work jointly on commercial organic waste management. Initially the Board indicated interest in working on research and policy development, with decisions on joint implementation depending on the level of intervention decided upon. Staff were asked to design alternatives for organic waste policy options.
2. **Policy Development Criteria:** In January, staff outlined some criteria for the Board to consider as it proceeds with its discussion. A summary of the criteria that emerged from the Board discussion is provided below, with additional background in Attachment 1 to this memo.
 - **Decisions should be consistent with the newly adopted Regional Policy Plan, and the Master Plans under development**
 - **Make decisions to assure protection of health and safety**

- **Consider the current organic waste recovery system, so that system changes increase recovery of organic waste**
 - **Use EPA's food waste management hierarchy**
 - **Expect private sector participation in meeting environmental goals, with public engagement only when necessary**
3. **Range of alternatives for organic waste management:** Staff provided a range of alternatives to gauge the Project Board's interest. The Board expressed interest in a number of interventions and concerns about others. In general the Board requested a review of specific strategies that have minimal government intrusion into the marketplace and without strict regulation, methods that use education and technical assistance, pilot programs that test various management strategies, alternate approaches that could realistically be implemented, and strategies that would benefit businesses economically and preserve jobs.

Based on that direction, the team of staff and consultants prepared the information outlined below for the April Project Board meeting.

Commercial Organic Waste Management: What we have learned

1. *Types of organic waste*

Commercial organic waste is considered to include: food scraps and other kitchen waste of all types (such as produce, meats, dairy, frozen foods, brewer's wastes, and fats, oils and grease); non-recyclable paper (such as plastic coated boxboard, contaminated corrugated); and plant waste (such as floral trimmings).

2. *Volumes of organic waste currently recovered, and potentially recoverable*

Staff will review data about the volumes of organic waste collected and available at the Project Board meeting. In summary,

- The volume of total MSW has declined since the economic recession began in 2008, but the volume of organic waste recovered has increased. A significant amount of organic waste remains in MSW, which could be recovered and separately managed.
- Total tons of mixed municipal solid waste managed in Ramsey and Washington Counties in 2010: 815,000 tons
- Of that:
 - MSW to landfill or resource recovery: 424,000 tons
 - Recycling: 324,000 tons
 - Organic waste managed: 48,000 tons
- Estimated volume of organic waste in the MSW landfilled or processed: 88,000 tons
- Organic waste is about 50% commercial, 50% residential

3. *Environmental Benefits: Greenhouse gas emission reductions associated with organic waste management.*

State law, regional policy, and the current county solid waste plans support and encourage separate management of organic waste. Besides the environmental benefits typically associated with waste management (reduced landfilling, reuse of products, conservation of resources), there are greenhouse gas emission benefits potentially available.

The Project's engineering consultant, Foth Infrastructure and Environment (Foth) evaluated the greenhouse gas benefits of separate organic waste management using several models, including EPA's Waste Reduction Model (WARM), a Canadian version of the WARM model, and the Climate Action Reserve's model. Memos that describe these analyses will be available at the Board meeting, and will be posted on the Project web site. Based on their analysis, they concluded:

- Life cycle greenhouse gas modeling with EPA's generally accepted WARM model indicates that there are GHG savings associated with diverting organics to composting and anaerobic digestion rather than waste-to-energy and landfilling.
- EPA standardizes the estimated GHG emissions in terms of carbon dioxide equivalents and then relates the differences to the comparable number of cars that could be "taken off the road" in a year. In the analysis of potential GHG savings by changing how organics are managed in R/W Counties versus the existing system, the GHG savings for composting 50% of R/W organics equates to removing 2,365 passenger cars and anaerobic digestion of 50% of R/W organics equates to removing 2,985 cars. In comparison, some other readily available studies provided the following:
 - Changing 5 Minnesota cities from open collection to organized collection for MSW and recyclables equates to removing 656 passenger cars
 - Organizing recycling among 41 Minnesota cities that currently have open recycling collection equates to removing 6,275 cars
 - Collection of 11,000 tons of recyclables via single-stream instead of dual-stream equates to removing 1,041 passenger cars
- The EPA WARM model is a more appropriate model to use to calculate potential carbon credit opportunities for different solid waste management system approaches than both the Canada Model and the Climate Action Reserve (CAR) protocols used. The WARM model considers full life cycle differences rather than a specific project (CAR) and it was created for the U.S. geographic area and is more sophisticated in some of its modeling methodology (Canada Model).

4. *Survey of commercial organic waste generators*

During 2010 the Project conducted analysis of commercial food waste generation issues. This was supplemented in the past two months with interviews of a number of businesses that generate food waste in the two counties. The focus of the surveys was to identify awareness and attitudes about separate organic waste management, to gauge interest in the issue, and test opinions about various interventions. Foth's summary of these interviews, in memo form, will be available at the meeting and be posted on the Project's website. Based on this work, Foth has these conclusions:

- There is a wide range of opinion about recovery options for food waste and other organics. Many food establishments in Ramsey and Washington Counties have tried and/or are currently engaged in food waste recovery, but it is still not a very common practice.
- All establishments visited had containers for recycling cardboard, as well as fats, cooking oil, grease (FOG). Therefore, there is already strong adoption of selected recyclables and FOG recovery.
- For most small and medium sized food establishments (e.g., restaurants and grocery stores), recycling and organics collection operations and improvements are a low priority. They do

not have time to research their options or make sure current recycling is as efficient as possible.

- About half of the establishments interviewed have some awareness of the County Environmental Charge (CEC) system. Most think it is a good policy and it should be maintained.
- Nearly all establishments rely on their haulers to inform them of new programs, rules and policies more than other sources of information about recycling.
- There are split opinions about the concept of a mandatory ordinance requiring food establishments to separate organics. Any mandatory proposal would need to be considered in phases if goals are not met and would need to consider potential exemptions.
- Regardless of the proposed new organics recovery system, or associated level of government intervention, the Counties should anticipate some political pushback against change.

5. *Commercial organic waste collection issues*

One barrier to increased collection of commercial organic waste is collection efficiency. Since the early 1990's this has been viewed as a problem, with collectors citing the high cost of collecting organic waste from a few businesses dispersed across a large area. Foth examined this issue and identified these conclusions:

- There is not a lot of readily available data regarding separate organics collection efficiency issues due to the fact there is not a great deal of current separate collection experience.
- It appears current routes require route densities yielding 8 to 10 tons collected from 30 to 60 stops within a route mileage of 20 to 60 miles. Hauling distances from routes to processing of approximately 35 miles is the current norm and apparently acceptable to organics haulers.
- Processor specifications have an impact on types of acceptable materials and therefore on the amount of organics available from potential customers. Farmers need just food wastes while composting and anaerobic digestion have a broader acceptable organics waste specification (e.g., including non-recyclable papers).

6. *The market for commercial organic waste*

As with any commodity, the ability of a collector to deliver organic waste to a market (farm, processing facility, compost facility, etc.) is key to being able to provide the service. Food to livestock markets have been strong in the east metro area, and most growth in commercial organic waste management has been in that sector. The market for organic waste by composting has been hampered by the slow process for amending MPCA rules to address standards particular to organics composting facilities (e.g., requirements for a paved composting pad) also siting issues have driven up costs. Existing facilities are distant from the east metro area, which has affected the collection infrastructure.

Foth was asked to research market issues related to organic waste. Conclusions are:

- The variety of current organic recovery technology options (e.g., food to livestock, feed manufacturing, composting) is reflected by an even greater variety of facilities, tipping fees and/or collection service fees.
- There is very little redundancy in the organics facility infrastructure today. In the Metro Area, there is currently only one composter, two animal feed manufacturers, and one extended family of livestock farmers.

- Prices charged for collection and management of organics is dependent on the value of the material as a commodity. Prices will vary by:
 - Type of material
 - Volume of material
 - Large, industrial source vs. smaller commercial establishment
 - Location
- Some generators (e.g., industrial bakeries) will get paid by the organics recovery provider (e.g., Endres Processing, LLC) for clean, large volume, high value material (e.g., bakery waste). Other generators (e.g., schools and other institutions) will be charged per barrel of clean, separated food waste by the hog farmers (e.g., Barthold Recycling, Inc.) for collection and recovery services.
- The wide variance in prices, both collection service fees and tipping fees, is another indication that the organics recovery infrastructure is not yet mature. There is not enough competition yet in the system to narrow price ranges.

Limitation and Barriers Gleaned from the Research

Based on the information gathered, in addition to the considerable amount of research conducted by the MPCA, SWMCB and counties over the past few years, the following key limitations or barriers to further development of organic waste management have been identified:

- ◆ Organic waste processing:
 - ▶ Lack of needed recovery service providers and facility processing capacity. This increases the business risk for a generator that decides to invest in separately managing a material.
 - ▶ Distance to end-users' facilities (e.g., hog farms, feed manufacturers, and the composters are all 20 to 40 miles from the core cities).
 - ▶ Perceived costs - the perception is that landfills are less expensive and relatively cheaper than separate organics management, and that adding organics service increases business costs.
- ◆ Collection:
 - ▶ No organic materials transfer stations (other than the Hennepin County Brooklyn Park facility). This is a collection efficiency barrier.
 - ▶ Collection efficiencies are limited; this is a chicken-and-egg situation, in which efficiency will improve when there are more customers, but collection service is needed to increase the number (and density) of customers.
 - ▶ There is a disincentive for some MSW haulers to promote this service (see below)
- ◆ Commercial organic waste generators
 - ▶ Space limitations at restaurants/groceries for separate containers both inside and outside the store.
 - ▶ Multiple organic recycling stream specifications. There is a different list of accepted vs. prohibited items for each recovery technology (e.g., food to livestock, feed manufacturing, composting).
 - ▶ Economic benefits of separate organics recovery are not readily apparent and too difficult to attain. For example, the value of the concept of "downsizing" trash service levels (e.g., reducing the number of pulls or the size of the trash dumpster) due to increased recycling and organics recovery is not well understood or a high enough priority for food establishments.
 - ▶ Generators report that their major source of information about waste is their hauler. Since a hauler may not have an interest in organic waste management, and could actually lose

money if the generator separated organic waste, there is a disincentive to haulers to promote separate management.

- ▶ There are a large number of generators that are not aware of the CEC and the potential for costs savings associated with separate organic waste management.

The case for separate organic waste management

State law, regional policy and the respective Ramsey and Washington County master plans encourage increased levels of separate management of organic waste. Previous regional policy included organic waste management as recycling. The recently adopted Regional Policy Plan now includes objectives that measure organics separate from recycling. There are policy expectations that separate organic management will be increased.

There are environmental benefits to separate organic waste management. The traditional benefits associated with recycling apply, including that it conserves resources and reduces landfilling. Separate management also can help to reduce greenhouse gas emissions.

Separate management of organic waste can be less expensive to the solid waste system than the alternative. It can be a benefit to businesses since it is exempt from state and local solid waste taxes. Further, the counties have documented that separate organic waste management can have benefits to businesses such as reducing worker injuries, avoiding nuisance conditions, increasing recovery of other recyclables, and reducing certain operating costs.

Intervention Strategies and Scenarios

Staff have examined a wide range of possible strategies for the counties to use to increase the amount of commercial organic waste managed separately. A number of these were outlined in January. Staff have further developed these, and have researched areas of the nation where these are in place, preparing case studies on several. The strategies fall into these categories: Financial Intervention, Education/Outreach Intervention, and Regulatory Intervention.

Staff have prepared several scenarios, based on the strategies, which illustrate a progression of involvement by the counties in the organics management system. Based on experience in other parts of the county, staff has projected the organic waste volumes that could be separately managed by employing the strategies in the scenario.

A matrix is included in Attachment 2 with these strategies and scenarios.

Panel – Perspectives on Commercial Organic Waste Management Opportunities

Staff have invited five people associated with the waste and organics industry to offer their perspective on commercial organic waste management. The purpose of the panel is to provide additional perspective for the Project Board on the information and approaches that staff have developed, and give commissioners the opportunity to ask representatives of industry about barriers and opportunities for commercial organic waste management. As part of the Resource Recovery Project Board meeting on April 28, the panel of five industry representatives will be asked to provide their perspectives on organic waste management following the staff presentation of data/information that has been gathered and intervention strategies/scenarios. The panel will include:

1. Organic waste composting facility, Specialized Environmental Technologies (SET), Kevin Tritz

2. Food waste to live stock firm, Barthold Farms, Pete Barthold
3. A waste hauler that has expressed interest in organic waste management, Waste Management, Julie Ketchum
4. Waste Recycler that has expressed interest in commercial organic waste management, Eureka Recycling, Tim Brownell
5. Independent waste hauler that collects organics, Randy's Sanitation, Jim Wollschlager

Attachment 1: Criteria to Guide Resource Recovery Project Policy Decisions on Commercial Organic Waste Management

Summary of Criteria

- 1. Decisions should be consistent with the newly adopted Regional Policy Plan, and the Master Plans under development.**
- 2. Make decisions to assure protection of health and safety.**
- 3. Consider the current organic waste recovery system, so that system changes increase recovery of organic waste.**
- 4. Use EPA's food waste management hierarchy.**
- 5. Expect private sector participation in meeting environmental goals, with public engagement only when necessary.**

Criteria with Explanations

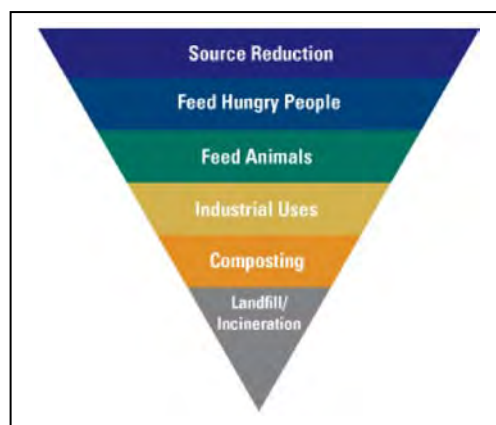
- 1. Decisions should be consistent with the newly adopted Regional Policy Plan, and the Master Plans under development:** Pursuant to State law, metropolitan counties are responsible to plan for solid waste management, assure that the Regional Policy Plan is implemented, and have been given a number of authorities to assure that happens. Actions taken by the Counties regarding organic waste management should be consistent with newly adopted MPCA Regional Solid Waste Management Policy Plan (April 2011).

The adopted Metropolitan Solid Waste Policy Plan includes Waste System Objectives, and for the first time the region will have objectives to meet for separate management of organic waste. Those objectives are set as a percentage of the total mixed municipal solid waste (MSW) stream. Current organics recovery is about 6%, the objective for 2015 is 3-6%, and for 2020 is 4-7%.

The current Ramsey and Washington County Master Plans include policies/strategies that address organic waste, and that will be considered in the plan revisions. They include:

- a. Both Counties include a County Supporting Initiative that states:
 - i. Ramsey and Washington Counties will promote food waste and organic waste diversion, with preference for waste reduction and recycling
- b. Both Counties include a strategy that reads:
 - i. The SWMCB and Member Counties [includes both Ramsey and Washington Counties] will encourage public institutions and food service/production industries to reduce, reuse, recycle or compost food waste and/or organic materials by providing technical information and assistance.
- c. Both Counties include a strategy that says they will work together through the "Resource Recovery Project to devote resources to identify and manage other waste streams from processing that can be more appropriately reduced, recycled or composted."

2. **Health and Safety:** Because the markets for organic waste result in products consumed by humans or animals, systems that handle organics waste should be planned designed and implemented to protect public health and safety. A number of entities regulate some of these activities, such as the Minnesota Board of Animal Health, USDA, Metropolitan Council Environmental Services, Minnesota Department of Health, and Minnesota Department of Agriculture.
3. **Consider the Current System:** A substantial amount of organic waste is currently diverted from MSW, into a variety of technologies. New efforts to manage organic waste should take into account these efforts, and care should be taken that new proposals do not simply supplant existing efforts.
4. **Environmental Protection: Use EPA’s food waste management hierarchy:** To date the counties have essentially treated all organic waste management methods as equal. The EPA has provided a food waste hierarchy, based, in part, on energy conservation and greenhouse gas emission balance. Absent any direction from the State of Minnesota, the counties should use the EPA hierarchy as guidance in decisions making. The hierarchy is as shown below:



Source: U.S. EPA web page “[Generators of Food Waste](http://www.epa.gov/wastes/conservation/materials/organics/food/fd-gener.htm#food-hier)”
<http://www.epa.gov/wastes/conservation/materials/organics/food/fd-gener.htm#food-hier>

5. **Public and Private Role:** Ramsey and Washington Counties have adopted an approach to waste processing, in their current Master Plans, and following the 2001-2002 study on Public Collection, which supports a merchant approach. Both Counties note in their plans that they will intervene in the market and use public funds to encourage processing only when necessary, and in a cost-efficient manner. The Counties policy is one that expects private sector participation in meeting environmental goals, with public engagement only when necessary to steer that participation. With that policy in mind, the following should be considered as decisions are made about organic waste management:

- a. Plans should respect past investments leading to the current collection and recovery infrastructure;
- b. Plans and actions should help optimize private investments in capital and operating costs;
- c. Plans and actions should seek to maintain a “level playing field” to the extent possible (i.e., does not unintentionally favor one recovery method over another); and
- d. Plans and actions should respect the regional nature of private service providers.

Attachment 2

MATRIX OF STRATEGIES AND SCENARIOS

SCENARIO 1 LOW LEVEL

Summary: Reduction from the current county level of effort. Provide existing educational resources on an as needed basis and collect data required for annual reporting. All aspects of Scenario 1 are voluntary.

Education & Technical Assistance	Financial	Regulation
Provide educational materials to businesses as requested.	Little or no financial obligation to Counties	Completely voluntary approach
	Continued use of the County Environmental Charge (CEC) as a financial incentive to separate organic waste	

Expected Results	Time Line	PUBLIC COSTS
Voluntary participation dependant on market prices for waste disposal.	N/A	Very low public costs

Pros	Cons	Case Studies
<ul style="list-style-type: none"> •Market driven •Flexible for businesses •Little or no financial commitment for Counties 	<ul style="list-style-type: none"> •Lacks continuity •Relies Solely on service providers' financial interest •Does not assist Counties meeting regional goals 	Did not explore interventions from other areas for this low-level scenario.

SCENARIO 2 CURRENT LEVEL

Summary: Active efforts to explore options to increase organics recovery. Continue education on management options, monitoring of existing programs and providing targeted assistance to schools, managed care and other businesses.

Education & Technical Assistance	Financial	Regulation
Monitor existing programs and provide assistance as needed.	Continue consultant contracts for technical assistance to public entities and institutions, as well as research	Voluntary participation.
Target specific generators for expansion of organics recovery	Explore limited or one-time funding for specific projects	Counties seek to establish recovery goals in cooperation with trade associations and policy makers
	Continued use of the County Environmental Charge (CEC) as a financial incentive to separate organic waste	
	Continue payment to Second Harvest Heartland for food rescue	

Expected Results	Time Line	PUBLIC COSTS
Maintained at the current level of approximately 48,000 tons/ year with possible increases from the addition of schools. Schools are now recovering 2,300 tons of food waste annually. Expect to double this amount over the next five years.	Currently implemented	Low cost

Pros	Cons	Case Studies
<ul style="list-style-type: none"> •Market driven •Flexible for businesses •Low financial commitment for Counties 	<ul style="list-style-type: none"> •Expansion of programs difficult since early adopters or easy targets are captured •Relies on a small number of service providers 	<p>Cedar Rapids, IA - offers commercial waste audits, one-time grants for composting materials & equipment (up to \$10,000) Toronto - 70% diversion goal includes organics. Offers free organics collection to businesses who use Toronto as a hauler.</p>

SCENARIO 3 MODERATE LEVEL

Summary: Moderately aggressive interventions that are focused on active involvement and expansion of organics program.

Education & Technical Assistance	Financial	Regulation
Provide specific and targeted educational resources to schools and businesses	Options include: <ul style="list-style-type: none"> •Contract for organic waste capacity at a facility. •Provide a subsidy or incentives (similar to current hauler rebate for processing waste) • Targeted grant to public institutions 	Voluntary phase followed by an ordinance requiring mandatory participation of selected generators if the voluntary approach does not reach specified targets. Required food establishments determined by business size. Requirements would be based on a variety of factors: waste generated and population served. All other types of businesses would be encouraged to start organics recovery programs. Provisions for exemptions or waivers.
Provide direct consultation to schools and businesses	Contracting for capacity: is similar to Hennepin County's use of the Brooklyn Park transfer station. It provides a means for a variety of service providers to offer SSO to customers without large capital costs that can be barriers to market entry. Tipping capacity at a transfer station could allow for expansion by a variety of providers.	
	Subsidy- Payment on a per ton basis for SSO managed by an approved method. Depending on how this system is structured payments could be made to the collectors, processors, or generators of SSO. Similar to current processing or hauler rebate the Counties already have jointly established.	
	Continued use of the County Environmental Charge (CEC) as a financial incentive to separate organic waste	

Expected Results	Time line:	Public Costs
Amount of organics recovered is expected to increase significantly. The amount of organics recovered would plateau with time as all available parties enter program. The specific amounts recovered would depend on the type of program(s) implemented but in all instances are expected to be significantly greater than current amounts collected.	Use a phased approach but could be fully developed and implemented within two years.	Moderate costs largely determined by rate of subsidy or rebate and the amount of material recovered. Also, added costs of consultation

Pros	Cons	Case Studies
<ul style="list-style-type: none"> •Subsidy option provides a pay for performance mechanism •Generators and market make the decision on service providers •Increased resources will result in greater private sector participation 	<ul style="list-style-type: none"> •Difficult to find transfer station capacity •Partnership and subsidy programs offer limited county control over the system making long term planning difficult. •Additional time and process needed for ordinance development. •Increased financial commitment for Counties 	<p>Issaquah, WA - offers in-store containers, signs and technical assistance. Requirement to participate is based on generator size.</p> <p>WLSSD - Required for businesses generating high volumes of organic material. FOG managed under different rules. Seattle - required for food establishments. Offers free technical assistance to generators, signs and training.</p>

SCENARIO 4 SIGNIFICANT LEVEL

Summary: Active engagement by the counties in the development and implementation of existing and new organics recovery programs.

Education & Technical Assistance	Financial	Regulation
Active technical assistance targeted at specific business and schools	Long term agreement with a public or private entity for development of organic waste processing capacity for use by the Counties.	Voluntary phase followed by an ordinance requiring organics recovery at any business that generates organic waste. Provisions for exemptions or waivers.
Consultation and resources provided for program development and implementation	Continued use of the County Environmental Charge (CEC) as a financial incentive to separate organic waste	

Expected Results	Time Line:	PUBLIC COSTS
Full capture and recovery of available organic waste.	Long -term project implemented in several phases. Initial phase-ordinance changes 1-2 years. Facility or processing capacity development and construction would take 1-2 years.	Moderate to high costs dependent on processing technology and specific contract details

Pros	Cons	Case Studies
<ul style="list-style-type: none"> •Ability to meet current and future waste diversion goals •Establish a regional market for commercial organics. •Accrue significant benefits: energy, reduction in green- house gases, reduction of landfilling. 	<ul style="list-style-type: none"> •Long term commitment for Counties •Relies on government involvement •Longer implementation time line 	<p>San Francisco - required collection for all generators. 100% diversion rate goal by 2020. Provides technical assistance, education, labeling. Owners and managers are required to provide program training and annual education to tenants, employers, and contractors (including custodial service). Put in place after voluntary programs failed to produce desired diversion outcomes.</p>

