

Attachment 4 – Scope of Services for Composting Source-Separated Organics in Food Scraps Bags

1 Introduction and Background

1.1 Introduction

This document provides a Scope of Services for a potential agreement between a Composting Facility ("Vendor") and the Ramsey/Washington Recycling & Energy Board ("R&E Board" or "R&E") for the acceptance and composting of organics in food scraps bags related to the Food Scraps Pickup Program, anticipated to launch in late Q3-2022. An agreement will be prepared using this Scope of Services as the basis for the final scope of services in the agreement.

Following is an outline of the Scope of Services:

- Vendor to receive source-separated organics (SSO) in food scrap bags from the launch of the Food Scraps Pickup Program (anticipated late Q3-2022) until the R&E's selected end-use market vendor's facility is operational. This is estimated to be twenty-four to thirty-six months from program launch.
- Vendor is to meet the composting standards defined in this RFP.
- Vendor may provide an optional price for transportation of food scrap bags to and from their facility using walking floor trailers owned and maintained by R&E.

1.2 R&E Board Background

The R&E Board is a public joint powers board of Ramsey and Washington counties, located in the eastern Twin Cities Metropolitan Area (East Metro). The R&E Board is responsible, on behalf of the two counties, for administering solid waste resource recovery activities, and programs to reduce the land disposal of waste. The R&E Board assists the counties in implementing an integrated regional solid waste management system in the East Metro aimed at implementing the Waste Management Hierarchy outlined in the Minnesota Waste Management Act (Minn. Stat. Chaps. 115A and 473, the Act).

The R&E Board has continued the work necessary to achieve environmental, economic and community benefits for the East Metro. Ramsey & Washington counties collectively have a total population of just under 821,000¹ and span a total of 593 square miles^{2,3} consisting of urban, suburban and rural areas. The R&E Board owns and operates the Recycling & Energy Center (R&E Center), in Newport, Minnesota, which receives and processes all acceptable mixed municipal solid waste (MSW) generated in the two Counties. The R&E Center currently produces refuse-derived fuel and recovers certain recyclable materials (ferrous and non-ferrous). The R&E center generally processes material 6-days per week, 364 days per year.

The R&E vision, "vibrant, healthy communities without waste," is being pursued in several phases. While R&E activities and each county's programs partner to work upstream, preventing waste and increasing source separation of recyclables, the R&E Center is in the process of being updated to recover more value from waste. Enhancements at the R&E Center (building

¹ <u>https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/</u>

² https://www.ramseycounty.us/your-government/about-ramsey-county

³ <u>https://www.co.washington.mn.us/102/County-History</u>



addition and additional equipment) are currently being installed and constructed to accommodate a new program to collect source-separated organics and enable the recovery of these high-value materials from trash using compostable food scrap bags. Details of the processing enhancements can be found <u>here</u>.

1.3 Description of Organics Collection Using Food Scraps Bags

The State of Minnesota has set a 75% recycling goal for the metropolitan area by 2030. Recent waste sorts show that food scraps (such as fruit peels, vegetable cuttings, eggshells, spoiled food, etc.) are approximately 25% by weight of MSW collected in Ramsey and Washington counties. When other organic wastes are included (like paper towels, cups and compostable cutlery), the total is close to 40%.

Businesses in Ramsey & Washington counties currently separate food scraps that are managed with composting, food recovery and food-to-livestock programs. Ramsey & Washington counties each offer a food scrap drop-off program for residents. A detailed list of currently acceptable and unacceptable organics materials for existing county drop-off programs are available at the following county website links.

- Ramsey County Food Scraps Drop-Off Program website
- Washington County Food Scraps Drop-Off FAQs

The R&E Board is in the final planning stages to establish a system to collect source-separated food scraps and other organics from households and potentially small businesses in the two counties (hereafter referred to as "customers") using food scraps bags co-collected with MSW. This progress includes the installation of additional processing enhancement upgrades at the R&E Center to accommodate separation of food scraps bags. The new food scraps recycling program is anticipated to be launched in a phased approach to residents of Ramsey and Washington counties starting in late Q3-2022.

Ramsey and Washington county residents who opt into the program will be provided with 60 food scraps bags annually at no charge to the residents. The process of collecting, processing and transporting organics in food scraps bags is shown in Figure 1-1. Under later program implementation, small businesses will be able to procure food scraps bags and opt into the program. Food scraps and other compostable products are placed into these extra strong bags, which are then tied shut and placed into the customer's existing MSW receptacle (such as a dumpster or trash cart). Food scraps bags will then be sorted out of the MSW either at the R&E Center or transfer stations contracted to deliver material to the R&E Center. Food scraps bags will be certified compostable by the Biodegradable Products Institute⁴.

⁴ <u>https://bpiworld.org/Get-Certified</u>









Residents put food scraps into "food scrap bags" and put them in their garbage cart for collection.

Haulers collect the bags along with the trash.





Food scraps are recycled at anaerobic digestion and/or compost facilities.

There are approximately 319,000 households in Ramsey and Washington counties. R&E estimates about 40% residential participation in the food scraps bag program at program maturity.

The voluntary, opt-in program is planned to be rolled out using a phased approach starting in late Q3-2022. Two sizes of food scraps bags will be available for customers to choose upon subscribing to the program.

Once delivered to the R&E Center, the food scrap bags will be removed from the MSW and placed in a walking floor trailer for delivery to a composting facility (initially) or an end use market (anaerobic digester).

2 Composting Source-Separated Organics in Food Scraps Bags Scope of Services

2.1 Overview

The R&E Board is seeking a qualified composting facility for the receiving and composting of SSO in food scrap bags as defined in the sections below.

2.2 Anticipated volumes

The estimated annual volume of SSO food scrap bags to be considered for this scope of services are shown in Table 1. The number of tons are estimated using an anticipated phase approach to the roll out of the program with a 40% participation rate at maturity. The tonnage estimates also assume sixty bags per year for each participating household. The estimated growth period begins at the anticipated food scraps pickup program roll-out date anticipated in late Q3-2022.

This will not be a "put or pay" contract. The R&E Board will not guarantee minimum volumes of food scrap bags to be delivered.



Table 1

Total FSB Tonnage Estimates for Ramsey and Washington Counties (Assuming a 5-year Growth Period to 40% Participation*)

Year		Estimated Annual Volume (Tons)
0	2022**	286
1	2023	1,896
2	2024	28,201
3	2025	28,964
4	2026	29,726
5	2027	30,488
6-10	2028	30,488

* Assuming 5-year growth period to 40% participation.

** 2022 year-end roll-out and partial year of service.

The R&E anticipates that the compost facility will need to be capable of accepting a walking floor trailer containing food scrap bags at a minimum frequency of weekly. The delivery schedule is anticipated to increase frequency as the program matures.

2.3 Required Composting Quality and Reporting

Compost produced by the Composting Facility Vendor must meet all of the following standards:

- a) <u>MPCA Compost Facilities Rule 7035.2836</u> (All provisions.) If Compost Facility Vendor is not subject to MPCA rule, the applicable USEPA federal permit/license or state permit/license that requires equivalent standards to the MPCA rule shall apply⁵.
- b) Produce a Class I compost as defined in MPCA Rule 7035.2836, Subp. 6.A or Minnesota Department of Transportation (MNDOT), <u>Standard Specifications for</u> <u>Construction</u>, 3890 – Compost: Grade 2⁶.
- c) United States Composting Council's Seal of Testing Assurance (STA) compost manufacturer certification program as specified in the most recent version of the U.S. <u>Composting Council STA Certified Compost Program Rules</u>. The Composting Facility Contractor must remain currently certified and participating in the U.S. Composting Council's STA program throughout the term of the Contract.

⁵ MPCA's Compost Facilities Rule, including provisions for composting of SSO, may take precedence over USEPA's sewage sludge biosolids disposal regulations: 40 (Code of Federal Regulations) CFR, Part 503 – Standards for the Use or Disposal of Sewage Sludge: <u>https://www.govinfo.gov/content/pkg/CFR-2018-title40-vol32/xml/CFR-2018-title40-vol32-part503.xml</u> (including Appendix B). Composted biosolids can meet either a "Process to Significantly Reduce Pathogens" (PSRP/Class B) or a "Process to Further Reduce Pathogens" (PFRP/Class A) standard, depending upon the operating conditions maintained at the facility.

⁶ MnDOT/s "Grade 2 Compost" allows source-separated organic material (SSOM) as a feedstock. Mn/DOT's "Grade 1 Compost" (derived from animal material and animal byproducts) does not allow SSOM as a feedstock.



- d) Finished compost products from the R&E food scraps pickup program under this Contract shall not be used for alternative daily landfill cover (ADC).
- e) The BPI certified compostable food scrap bags shall be included in the composting operation and be fully composted with the other organic material. The compostable bag film must not be disposed of in the operation's residue and/or landfilled.

The Composting Facility Vendor will be required to report monthly metrics showing compliance with these standards. Vendor will provide access to R&E staff to Vendor's facility for inspection of operations with 1-day notice.

2.4 Acceptable Items in Food Scrap Bags and Anticipated Contamination

The food scrap bags in this program will contain SSO only, as specified in the R&E Board List of "acceptable" and "not acceptable" SSO waste items⁷. Selected examples of the "acceptable" SSO items include:

- a) "Clean" food scraps
- b) Certified compostable products (e.g., Biodegradable Products Institute [BPI] certified)
- c) Non-recyclable, compostable paper products
 - i. R&E Board shall use best management practices to help assure clean, high-quality SSO is contained in the food scrap bags.
 - ii. Contamination shall be measured through actual sorts conducted by the Composting Facility Vendor at Compost Facility Vendors' expense twice per year, in April and October, of randomly sampled loads of food scrap bags delivered under this contract. Contamination of inbound food scrap bags is anticipated to be less than 10 percent.

2.5 Anticipated Contract Length

A contract based on the scope of services described in this RFP will be for a term that will begin on the food scraps pickup program roll-out date, anticipated in late Q3-2022. The contract will continue until the selected end use market vendor's facility is fully operational or capable of accepting the food scrap bags. This is estimated to be twenty-four to thirty-six months from program launch. R&E may choose to extend the contract length as necessary.

2.6 Optional Vendor Supplied Transportation

An optional price for transportation of food scrap bags from the R&E facility to the vendor's facility may be provided by the proposer. This option includes a vendor provided truck and driver to transport a loaded walking floor trailer owned by R&E from the R&E facility to the vendor's facility and returning the trailer to R&E. During initial roll out of the food scraps pickup program, the walking floor trailer may not be fully loaded and will still need to be delivered to the vendors facility at a minimum weekly. The price for this option should be provided as a cost per round trip will not be based on a per ton cost.

⁷ Accepted and not accepted lists are located at <u>Ramsey County food scraps recycling acceptable items</u> and <u>Washington County food scraps recycling accepted items</u>.