



Agenda Report

TO: CCCSWA BOARD OF DIRECTORS
FROM: BART CARR, SENIOR PROGRAM MANAGER
KENT ALM, LEGAL COUNSEL
DATE: NOVEMBER 20, 2009

SUBJECT: **OUTLINE FOR CONTRACT WITH EBMUD FOR PROCESSING SERVICES
SUPPORTING THE COMMERCIAL FOOD WASTE DIVERSION PROGRAM**

SUMMARY

Over the past year, a pilot program to separately collect and process commercial food waste for digestion at EBMUD's treatment plant has been operating and proven successful. Based on the success of the pilot, the CCCSWA is preparing to formalize the food waste program and, with final approval from the Board, begin its expansion in September, 2010. To prepare for this expansion, the CCCSWA must develop and execute an agreement with EBMUD to secure their long term service for processing commercial food waste. CCCSWA staff have been negotiating with their counterparts at EBMUD since June to develop an outline of contract terms, which include consensus in the following areas:

- Contract Length
- EBMUD Processing Capacity for CCCSWA Food Waste
- EBMUD Disposal Fee (Per Ton Fee)
- Definition of Acceptable Food Waste Materials and Specification for Delivered Material
- Unacceptable Materials and Contamination Control
- Ownership of revenue resulting from generation of electricity and anticipated sale of carbon credits

The negotiated terms outlined in this report will, upon your approval, become the basis for final contract development. With Board approval of these terms, CCCSWA staff and legal council will continue to work with EBMUD to complete the agreement and present a final draft for approval at your January 2010 Board meeting.

RECOMMENDED ACTION

1. Approve CCCSWA and EBMUD Outline of Contract Terms and Authorize Staff to continue Negotiations with EBMUD Resulting in a Draft Contract for Board Review at the January Board Meeting.

DISCUSSION

The CCCSWA has partnered with EBMUD (along with AWS) to implement the food waste collection pilot which began in November 2008. EBMUD provides final processing service for the pilot, which consists of anaerobic digestion of the food waste material. This process both "recycles" the food waste resulting in a compost-like soil amendment, and also creates methane gas, which is captured and burned to produce energy. The combination of food waste diversion producing a soil amendment and methane gas capture resulting in electricity generation makes this process very "green".

The EBMUD process offers a unique opportunity for the CCCSWA to divert large quantities of food waste using a processing facility that is local, currently established and operating, and provides both diversion credits and, due to the methane capture, additional green house gas reduction benefits that will benefit all CCCSWA member cities. In May, the CCCSWA Board of Directors authorized staff to initiate negotiations with EBMUD that would secure ongoing processing capacity and lead to a long term contract for EBMUD digestion services. CCCSWA staff began meeting with EBMUD staff in June to develop a framework for a long term contract between both agencies. These negotiations have resulted in an outline of terms for a contractual agreement between both agencies. These terms include:

1. **Contract Length.** The CCCSWA and EBMUD have agreed to a five year contract length for processing commercial food waste. Staff proposes a five year term as an appropriate length because of the nascent character of this program and this proposed period corresponds to the time remaining in the current CCCSWA franchise agreements with Allied Waste Services and Waste Management.

2. **Disposal Fee and Fee Escalation.** At the beginning of negotiations, EBMUD informed the CCCSWA that they were reviewing their processing costs and would need to increase the disposal fee for CCCSWA and other food waste disposal from the \$32.50 per ton rate currently in use. They related that after their initial review, a \$90 per ton fee would be required to cover their costs. Through negotiations and processing cost refinement on the part of EBMUD, both sides agreed to set the new disposal fee at EBMUD at \$45 for the first year of the contract and then increase the disposal fee to \$50 per ton for year two of the contract, and \$55 per ton for year three of the contract. Both sides agree to conduct a cost review for disposal fee re-set after year three for remaining two years of contract. CCCSWA has requested a \$61/ton disposal fee cap for final two years of the contract or a contract exit clause after year three if EBMUD determines a significantly higher rate is warranted after their cost review. Proposed disposal fees are based on the condition of material currently being delivered to EBMUD. The following table lists the proposed disposal fee levels by contract year:

Period	Dates	Fee
Pilot Program/Interim Period	3/1/10 – 8/29/10	\$45
Contract Year 1	9/1/10 – 8/31/11	\$45
Contract Year 2	9/1/11 – 8/31/12	\$50
Contract Year 3	9/1/12 – 8/31/13	\$55
Contract Years 4-5	9/1/12 – 8/31/15	TBD by Cost Review

3. **Food Waste Specification.** The CCCSWA agrees to offer commercial food waste that will meet the 2" minus specification required by EBMUD and maintain current material condition. The condition of material currently being delivered to EBMUD, as of October 2009, is acceptable to EBMUD. Additionally, the CCCSWA will include a commitment to control contamination and unacceptable materials from delivery to EBMUD.

4. **Contamination Control.** The CCCSWA recognizes that the EBMUD digestion process has a low

tolerance for contaminants in the food waste material. The CCCSWA commits to participant training and oversight to control and reduce contamination with the assistance of Allied Waste Services and program training consultants, ESA Associates. ESA Associates will only provide training assistance during expansion of the program. The following paragraphs describe acceptable food waste, unacceptable materials, and steps taken to control contamination:

- a. *Grinding of Food Waste. Before Delivery, the Food Waste must be ground into pieces approximately two inches square in size, or smaller. Care will be taken to remove unacceptable materials prior to delivery to EBMUD.*
- b. *Acceptable Food Waste & Unacceptable Materials. Acceptable food waste includes: Fruits, Vegetables, Meat, Seafood, Small Bones, Dairy, Eggs, Breads, Pastas, Sauces, Cooking Oil, Grease, Tea Bags, Coffee Grounds & Filters, and other related food waste materials. Unacceptable waste materials considered contamination by this program includes: plastic (except plastic bags used for collection of acceptable food waste), styrofoam, glass, metal, large volumes of paper (incidental pieces of paper, such as napkins or paper toweling, disposed with food waste is acceptable), cardboard, wood, yard waste, and all other non-food waste materials. CCCSWA and EBMUD agree to explore methods that will allow processing of additional organic materials in the future.*
- c. *Preventing Contamination of Loads. CCCSWA will take reasonable steps to prevent unacceptable materials from being included in Food Waste delivered to the District, including education of Collector and Commercial Food Waste Generators, or termination of Food Waste collection service to certain Commercial Food Waste Generators.*

5. **Plastic Bags.** In August, the CCCSWA became aware that plastic bags had become a major concern for EBMUD due to repetitive jamming of equipment. A previous grinder used at Newby Island was not performing adequately in grinding plastic bags that food waste generators use to contain the food waste. EBMUD processing equipment requires all material, including film plastic from bags, to be ground to a 2" minus size so it can be managed by the EBMUD process. The CCCSWA responded to this by retesting the Morbark Grinder for a month long period during October, which established to EBMUD's satisfaction, the grinder's ability to produce processed food waste that meets EBMUD's specification. Given this recent history, both sides have established their positions regarding ongoing use of plastic bags which is described in the following paragraph:

EBMUD acknowledges that the food waste is offered for collection in plastic bags. CCCSWA's collector picks up the bagged food waste and transports for grinding, where plastics bags are processed along with the food waste. CCCSWA acknowledges that large quantities of film plastic larger than the two inch square size can be problematic for the District's operation. The CCCSWA will seek alternatives which may control or reduce the use of plastics bags by program participants.

6. **Operating Throughput Commitment.** EBMUD acknowledges that the CCCSWA will need approximately one and a half years, beginning in September, 2010, to expand collection to those generators who qualify for inclusion in the program. The CCCSWA estimates a minimum of 15 tons per day or 75 tons per week (after grinding) once the program has been implemented. EBMUD commits to accept this minimum tonnage per day/week and will adjust the acceptance amount based on actual program performance/disposal as the program matures.

7. **Revenue Sharing.** Processing of commercial food waste creates the potential to generate revenue in a number of ways. First, the capture and use of methane gas as a fuel allows EBMUD to generate

electricity. Currently, the majority of the generated electricity is used for the electrical needs of EBMUD's Oakland-based Main Wastewater Treatment Plant but with the addition of a new turbine generator, enough excess electricity will be generated for sale to PG&E. This will create a revenue stream which EBMUD will use to offset significant capital costs for facility improvements that, in part, will support the food digestion process.

"Renewable Energy Credit" or "REC" represent one megawatt hour of renewable energy and can be sold or traded by the owner of the REC. RECs are created through certification by a registered certification organization. REC certification and trade is still in early stages of development in the United States. EBMUD has indicated their intent to retain ownership of RECs resulting from energy generated from methane capture, should they be certified.

Finally, CCCSWA will retain ownership of "Carbon Credits" that may result from the capture of methane gas from CCCSWA food waste tonnage delivered to EBMUD for processing. One carbon credit is equal to one metric ton of carbon that is prevented from release into the atmosphere, which can contribute to climate change. The CCCSWA anticipates joining with EBMUD to "validate" the EBMUD digestion process and the amount of methane gas that is captured. The amount of methane will be converted into its equivalent of carbon (CO₂e). Based on the amount of food waste disposed by the CCCSWA program, credits will be allocated to the CCCSWA for potential trading on the U.S (Chicago) Climate Exchange, or other international climate exchanges, which will result in creation of revenue. The CCCSWA agrees to pay for validation of its allocation of carbon credits.

The following table lists potential revenue sharing activities resulting from capture of methane gas and generation of renewable energy, and ownership of resulting revenue. Because neither RECs nor Carbon credits have undergone formal certification and/or validation, their potential value is not known at this time.

- *EBMUD - 100% of revenue resulting from sale of electricity*
- *EBMUD - 100% of revenue resulting from sale of RECs*
- *CCCSWA - 100% of Carbon Credits from CCCSWA delivered tonnage (CCCSWA pay sits share for validation of its allocation of carbon credits)*

Final Contract Development and Review. These terms outlined here represent the primary points for agreement between the CCCSWA and EBMUD for formation of a contract between both agencies. With approval from the CCCSWA Board of Directors, staff from both agencies can proceed with developing the contract which will result in a draft contract presented to you at your January 2010 Board Meeting. The following schedule provides milestone dates for contract development:

- *December, 2009- Present Proposed Outline of Contract Terms*
- *January, 2010- Present Draft CCCSWA/EBMUD Contract and Approve for Signature by CCCSWA Executive Director*
- *February, 2010- Execute Contract with effective date of March 1, 2010*