



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Solid Waste

To: City Council

From: City Manager & Staff

Council Meeting Date: September 3, 2019

Re: Amending Chapter 13 of the City Code to permit licensed waste haulers to transport food waste.

Executive Summary

Staff has prepared for Council consideration and ordinance to amend Chapter 13 of the City Code to allow licensed waste haulers to transport and haul food waste to approved composting facilities.

Discussion

In October of 2018, the Energy and Environment Commission provided a report to Council recommending changes to the code of ordinances to allow private waste haulers to collect and transport food waste for composting by private entities. Prior to making a recommendation, the Solid Waste Division provided a report In December 2018 proposing a study to evaluate the environmental and economic benefits of different methods of disposal of food waste and other organic compounds prior to making modifications to the city code. The goal of this evaluation was to identify the highest and best use for the disposal of food waste and other organic wastes that are generated in Columbia. Burns and McDonnell performed this study and the final report is attached.

The conclusions of the report are as follows:

- Current operations result in approximately 54,650 metric tons of CO_{2e} (Carbon Dioxide equivalent) emissions.
- Additional food waste collection and composting would produce approximately 54,500 to 56,190 metric tons of CO_{2e} emissions. Implementation would have a capital cost of approximately \$3,500,000 to \$4,000,000 and annual operating cost of approximately \$3,200,000 for personnel, fuel and vehicle maintenance.
- Anerobic Digestion would produce approximately 53,720 to 55,630 metric tons of CO_{2e} emissions. Implementation would have a capital cost of approximately \$13,000,000 - \$19,000,000 and annual operating cost of approximately \$3,200,000 - \$3,700,000 for personnel, fuel and vehicle maintenance.

This demonstrates that expanding the diversion of organic wastes from the landfill by collecting it separately for either composting or anerobic digestion does not provide significant environmental benefit. In most scenarios it actually results in higher emissions than the current operation of landfilling the organic wastes and utilizing the gas generated by the bioreactor landfill to produce electricity. This combined with the relatively high cost to implement such a program leads staff to recommend the following:



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- The Solid Waste Division will continue to encourage residents to compost organic and food wastes on their properties and continue the current program of providing education on proper composting practices and providing composting bins for our customers.
- The Solid Waste Division will continue to provide food waste collection services at the current level however; the program should not be expanded to include additional customers.
- Council should adopt the proposed revisions to Chapter 13 of the city code. These revisions will allow licensed waste haulers to collect and transport segregated food waste only from commercial establishments. The revisions only allow for disposal of the food waste at composting facilities that are permitted by the Missouri Department of Natural Resources. Adopting these revisions will allow businesses that have goals for diversion of organic material to have a means to accomplish their goals.

Fiscal Impact

Short-Term Impact: No fiscal impact is anticipated due to the ordinance revision.

Long-Term Impact: No fiscal impact is anticipated due to the ordinance revision.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Not Applicable, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable

Legislative History

Date	Action
05/06/2019	REP39-19 Burns and McDonnell Organic Waste Management Report – Withdrawn
12/03/2018	REP107-18 Request to revise the waste hauler ordinances
10/01/2018	REP85-18 Correspondence from the Environment and Energy Commission regarding waste hauler ordinance.
08/06/2018	REP74-18 Solid Waste Utility Compost Operation and Food Waste Collection Programs

Suggested Council Action

Approve the ordinance amending Chapter 13 of the City Code.