



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Cambridge Health and Environmental Committee
Cambridge City Hall
795 Massachusetts Ave.
Cambridge, MA 02139

October 5, 2018

Dear City Councilors Jan Devereux and Quinton Zondervan:

We understand that the Health and Environmental Committee that you co-chair will meet on October 9 to discuss composting and recycling programs, and that one of the challenges to be discussed is codigestion of food waste with biosolids at municipal water resource recovery facilities (WRRFs). EPA is sending this letter to provide technical information that may be of assistance in your discussions.

First, we congratulate you on your food waste diversion program, which aligns well with Massachusetts's Solid Waste Master Plan and is helping you to meet your own zero waste goals. Cambridge is at the forefront of US cities diverting food waste from disposal, and we hope that your model leadership will help other cities implement similar programs in their communities.

There are many ways to manage organic wastes in the municipal solid waste stream, each with advantages and disadvantages, and the appropriate management techniques are highly specific to individual locations. The Massachusetts Department of Environmental Protection, among other state entities, has been promoting increasing infrastructure to manage food waste to support the 2014 Commercial Organics Ban.

To assist municipalities in decision-making around food waste recovery and diversion, EPA has developed the Food Recovery Hierarchy shown below. Anaerobic digestion falls into the "industrial use" category, less desirable than reducing waste, feeding people, and feeding animals but preferable to composting. For more information on the hierarchy, please visit <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>.

The discussion about managing food waste is often framed as an either/or discussion between techniques such as composting and anaerobic digestion, but the approaches can work together. Anaerobic digestion reduces the solids volume of digested materials by about 50%, and the remaining 50% can be composted post-digestion. EPA conducted life cycle assessment research at a small WRRF in a rural location that contemplated codigesting biosolids with food waste, then composting the digestate to Class A compost as agricultural amendment and fertilizer replacement. The results of this life cycle assessment can be found at https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=338074.

We know concerns have been raised about toxics. As DEP states in its letter to you dated today, GLSD consistently meets standards under MassDEP's regulations for Land Application of Sludge and Septage (310 CMR 32.00). These regulations work in tandem with EPA's rules on biosolids use (commonly called the "503 rule," for the part of the Code of Federal Regulations they fall under) to govern material that is mixed with biosolids in a digester if the end product is intended for beneficial reuse. EPA believes that biosolids are an important resource that can and should be safely used. The 503 rule provides comprehensive requirements for the management of biosolids generated during the process of treating municipal wastewater and creates incentives for beneficial use of biosolids. For more information on the 503 rule, please see the document "A Plain English Guide to the EPA Part 503 Biosolids Rule" available at <https://www.epa.gov/biosolids/plain-english-guide-epa-part-503-biosolids-rule>.

In conjunction with our 503 regulations, EPA has a robust industrial pretreatment program designed to keep metals and other toxic chemicals from entering municipal wastewater treatment collection systems. For more information on the National Pretreatment Program, please visit <https://www.epa.gov/npdes/national-pretreatment-program>.

We applaud your efforts and your leadership role in managing food waste sustainably. EPA supports the practice of codigestion of food waste and biosolids at municipal water resource recovery facilities, and would be happy to provide technical assistance to help you navigate questions that may come up as you consider the processing of Cambridge's municipally collected food waste.

Sincerely,



Ken Moraff, Director
Office of Ecosystem Protection