Meeting Agenda

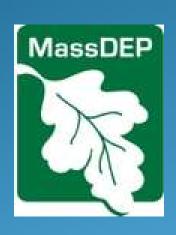
1:00 – 1:20 MassDEP Update on Food Waste Programs and Progress, John Fischer, MassDEP

1:20 – 2:35 Presentations from Recipients of MassDEP Recycling Loan Fund Loans & Recycling & Reuse Business Development Grants

- Ken Verhelle, AgGrid Energy LLC
- Erin Keohane, Spoonfuls
- Mary Stucklen, Tommy's Compost Service
- Daniel Buonagurio, Recycleworks, Inc.
- Syed Dong, Black Earth Compost

2:35 – 3:00 **Open Q&A Session**

Food Waste Diversion Progress and Trends



Organics Subcommittee
John Fischer, MassDEP
March 14, 2024

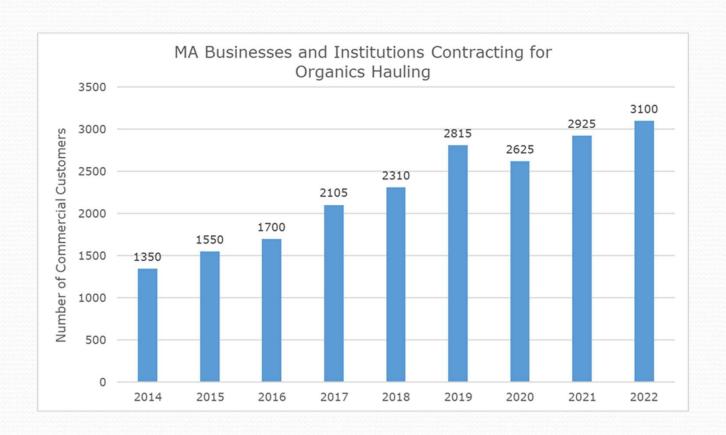
Goals and Capacity

- Food waste represents more than 1/5th of our trash
 - about 930K tons
- 2030 goal increase annual diversion by 500K tons over 2018 baseline of 280K tons
 - 78oK tons total
- Current waste ban alone will get us to about 400K tons
 - Remainder would come from smaller sources
- Current management capacity about 500K tons
- Future need for more distributed capacity

Food Waste Diversion Data

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Type of Use	2016	2,017	2018	2019	2020	2021	2022
Anaerobic							
Digestion	48,234	87,856	159,563	187,947	211,215	175,264	217,180
Compost	79,586	52,991	42,321	40,569	33,038	25,273	31,931
Animal Feed	26,250	26,777	39,593	40,014	8,828	24,719	43,033
Food Donation	22,712	25,940	26,637	27,703	30,004	23,592	22,085
Other	13,277	12,819	8,065	9,552	38,745	40,380	43,615
Rounded Total	190,000	210,000	280,000	310,000	320,000	290,000	360,000

Businesses Diverting Food Waste



Strategy by Generator Size

- Large: >1 ton per week
 - 2014 Waste ban combined with technical assistance & market development
- Medium: ½ ton 1 ton per week
 - 2022 waste ban and business collection grants
- Small: <1/2 ton per week and residents
 - Multi-pronged approach
 - Curbside, drop-off, home composting, small scale local composting, reduction education, possible ban

Why are waste bans important?

- Need to ensure adequate capacity to manage our waste
 - Preferred option is to reduce the amount of waste disposed
 - Disposal capacity limitations will affect disposal cost
- Solid Waste Master Plan Goals
 - Reduce disposal by 30% by 2030
 - Reduce disposal by 90% by 2050
- Other Benefits
 - Capture value of materials
 - Foster local economic and job growth

Waste Ban History & Background

- First waste bans promulgated in early 1990s
- Done via regulation under statutory authority
- "No person shall dispose, transfer for disposal, or contract for disposal or transport of the restricted material…"

Waste Ban Approach

- Develop and implement new waste bans over period of several years
- Combine with technical assistance, education and outreach, and market development initiatives
- Primary focus on compliance by larger generators businesses and institutions
- New bans emphasize compliance assistance initially

Waste Ban Implementation

- Inspections, Compliance & Enforcement
 - Solid waste facilities required to maintain and implement waste ban compliance plans
 - MassDEP conducts inspections at solid waste facilities
 - Issue enforcement when observe loads with significant amounts of a banned material
 - Typically, only enforcement against business, institutional, or government generators or waste haulers
 - Not individual residents

Change to Food Waste Ban

- Initial commercial food waste ban in 2014
 - Businesses that dispose of >1 ton per week
 - About 2,000 businesses
- Expanded commercial food waste ban
 - Effective November 2022
 - Businesses that dispose of $> \frac{1}{2}$ ton per week
 - Will roughly double number of businesses subject from about 2,000 to 4,000

Estimated New Businesses Subject by Sector

Sector	Estimated Number of New Businesses Subject		
Full-Service Restaurants	*809		
Limited-Service Restaurants	*511		
Manufacturers and Processors	123		
Supermarkets	115		
Hotels	92		
Hospitals	81		
Distributors and Wholesalers	75		
Nursing Homes and Residential Facilities	31		
Primary and Secondary Schools	29		
Schools, Colleges, and Universities	9		
Correctional Facilities	3		
Total	1,878		

Common Questions

- What if a chain with multiple locations?
- What if multiple businesses together (e.g., shopping mall food court?)
- What if a school system with multiple locations?
- Is packaged food subject?
- How does the ban apply to dormitories or retirement communities?
- https://www.mass.gov/doc/guidance-for-businesses-institutions-haulers-commercial-organic-materials-waste-ban/download

How can my Business Comply?

- Compliance standard is to dispose of <1/2 ton per week of food waste
- Can comply through any combination of:
 - waste reduction/prevention
 - Food rescue and donation
 - On-site systems
 - Sending food waste to animal feed, compost, or anaerobic digestion
- If comply with the 1 ton per week ban, may need to take further reduction/diversion steps now

Inspections and Enforcement

- Since November 2022 inspected >4,400 loads of trash
- Since October 2014 inspected 45,000 loads
- Total of 138 enforcement actions for "commercial organic material"
 - 125 notices of non-compliance
 - 13 consent orders with penalties (\$860-\$5,160)
- Also issue "warning letters" based on load observations, facility data, or third party data
- In process of hiring two new inspectors

Supporting Programs & Policies

- RecyclingWorks in Massachusetts
 - Business assistance
 - More than 750 food waste assistance deliveries
 - Compost site assistance
- Sustainable Materials Recovery Program
 - Municipal Grants
- Recycling Business Development Grants and Recycling Loan Fund – for food waste alone:
 - 17 loans for \$4.6 million
 - 17 grants for \$1.7 million

Climate Chief Recommendation

- October 2023 report recommendation #19
 - (19) DEP, in coordination with EEA, EOHHS, DCAMM, and other agencies as necessary, should implement a plan to ensure institutions generating more than half a ton of commercial organic waste per week divert that waste to beneficial use in composting, biogas generation, and reuse.

MassDEP Outreach Summary

- Direct outreach to individual businesses
- Outreach to associations, chambers
- Organics Subcommittee meetings
- Speaking to groups, events
- RecyclingWorks outreach and assistance
 - Blog posts, case studies and web-based guidance
 - Meetings and workshops
 - Monthly newsletter and email list of about 7,500 people
 - Direct technical assistance

For More Information

Solid Waste Master Plan

https://www.mass.gov/guides/solid-waste-master-plan

MassDEP Food Waste Page

https://www.mass.gov/guides/commercial-food-material-disposal-ban

Organics Subcommittee

https://www.mass.gov/service-details/massdep-organics-subcommittee

Organics Action Plan

https://www.mass.gov/doc/massachusetts-organics-action-plan-january-2022/download

RecyclingWorks in Massachusetts

www.recyclingworksma.com

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