

# Organics Subcommittee Meeting



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# Overview

- Waste ban development schedule
- Food waste disposal & generation estimates
- Draft Organics Action Plan by section



# Waste Ban Development Schedule

- Fall 2019-Spring 2020: waste ban regulations and guidance internal development
- Spring/summer 2020: publish draft regulations and hold public comment & hearings
- Fall 2020: promulgate revised regulations
- Fall 2021: proposed effective date of new regulations
- *Note: also developing comprehensive regulations revisions that would follow this*

# Food Waste Data by Year

Processing Type	2016 Tonnages	2017 Tonnages	2018 Tonnages
Compost	80,000	53,000	44,000
Animal Feed	26,000	27,000	40,000
Anaerobic Digestion	48,000	88,000	160,000
Other	14,000	13,000	8,000
Food Donation	23,000	26,000	26,000
Total	190,000	206,000	278,000

- 2017 reporting errors (composting)
- Does not include via wastewater
- Understates animal feed
- Source reduction
  - 145 businesses
  - >1,000 tons/year reduction



# Program Updates

- As of fall 2019 - 55 NONs + 5 penalties
  - $\frac{3}{4}$  since start of 2018
- RecyclingWorks in MA - 2019
  - TA to 120 businesses for food waste reduction
  - 137 hotline inquiries
  - Presented at 19 events
  - Posted 27 blog posts



# Food Waste Reduction Capacity

- Source Reduction
  - Typical reductions from business tracking = 50%
- Food Donation and Rescue
  - 26,000 tons in 2017
  - >50% growth since 2014
- Food Waste Collection
  - 70% increase from 1,350 customers in 2014 to 2,300 in 2018
- Compost and AD
  - 150k TPY compost capacity
  - >600,000 TPY AD capacity (operational or under development)
  - 7 de-packaging operations, 2 more under development
  - Also growing infrastructure in neighboring states



# Food Waste in Trash

- 2016
  - 26% of trash
  - MSW disposal = 4.6 million tons
  - Food waste in trash = 1.2 million tons
- 2019 (draft)
  - 21% of trash
  - MSW disposal (2018) = 4.5 million tons
  - Food waste in trash = 950K tons
- Decrease of about 250K tons
- Based on municipal waste combustor waste characterizations

# Commercial Food Waste in Trash

- Using 2019 estimate of 950K tons
- About 55% commercial = 525K tons
- About 45% residential = 425K tons





# “Generation” vs. Disposal

- Commercial food waste generation estimates much higher
- About 1.3 million tons vs. 525K tons
  - 280k tons diverted (as of 2018)
  - Additional managed through wastewater, rendering, other byproducts
  - Some uncertainty with generation estimates
    - Esp. for manufacturers/processors

# Generation by Size Category

Size Category (tons per week)	Number Generators	% of Generators	Total Est. Generation (tons per year)	% of Total Generation
>2	955	4%	265,657	21%
1-1.99	1,942	8%	734,961	57%
0.5-0.99	1,872	8%	94,547	7%
<0.5	18,204	79%	196,395	15%
Totals	22,973	100%	1,291,561	100%

Sector	Businesses generating over 1 ton of food waste/week	Businesses generating over ½ ton of food waste/week	Percent of business sector subject to proposed waste ban
Hospitals	77	158	60%
Nursing Homes and Residential Facilities	8	39	4%
Full Service Restaurants	850	1,659	17%
Limited Service Restaurants	111	622	33%
Supermarkets	468	583	12%
Warehouse Clubs and Supercenters	31	31	84%
Hotels	137	229	14%
Correctional Facilities	10	13	76%
Schools, Colleges, and Universities	70	79	87%
Manufacturers and Processors	774	897	89%
Distributors and Wholesalers	355	430	85%
Primary and Secondary Schools	0	29	2%
<b>Total</b>	<b>2,891</b>	<b>4,769</b>	

Sector	Annual sector-wide tonnage subject to current ban	Annual sector-wide tonnage subject to proposed ban
Hospitals	20,747	23,528
Nursing Homes and Residential Facilities	985	2,177
Full Service Restaurants	91,158	120,000
Limited Service Restaurants	7,180	25,813
Supermarkets	101,672	105,677
Warehouse Clubs and Supercenters	7,533	7,533
Hotels	17,357	20,507
Correctional Facilities	1,455	1,560
Schools, Colleges, and Universities	28,793	29,116
Manufacturers and Processors	614,848	649,006
Distributors and Wholesalers	66,944	70,663
Primary and Secondary Schools	0	867
<b>Total</b>	<b>958,670</b>	<b>1,056,445</b>



# Draft Organics Action Plan by Section



# Evaluation & Assessment

- Annual facility reports – AD, compost, animal feed, donation, source reduction
- Waste characterization data – every 3 years
- Hauler customer service counts
- Municipal food waste collection data
- RecyclingWorks in Mass technical assistance
- MassDEP waste ban inspection & enforcement data

# Reducing Wasted Food at the Source

- School food waste reduction – promote through Green Team
- [RecyclingWorks BMPs](#) – develop by generator size category – promote through business associations
- RecyclingWorks technical assistance
- Support increased use of food waste tracking systems
- Leverage tools for consumer focused food waste reduction campaign
- *Support standardized food date labeling practices (Mass Food Systems Collaborative)*



# Food Donation & Rescue

- RecyclingWorks BMPs – promote through business associations & coordinate w/local public health officials
- RecyclingWorks technical assistance
- Targeted grants to support food donation infrastructure
- *Propose state tax credit for farmers and others who donate food (Mass Food Systems Collaborative)*
- *Explore funding models to make food donation and rescue more sustainable (Mass Food Systems Collaborative)*



# Large Generators (> 1 ton/week)

- Continue current approach
- RecyclingWorks in MA assistance and guidance
- Waste ban inspections & enforcement
  - New emphasis will be on 1-2 ton per week generators
- Requests for information to businesses
- Supporting infrastructure development
  - Recycling Loan Fund and Recycling Business Development Grants

# Medium Generators (1/2 – 1 ton/week)

- Conduct extensive outreach to affected businesses
- Prioritize Recycling Works in MA assistance and guidance
  - Target assistance to priority sectors – esp. restaurants
  - Emphasize source reduction of food waste and donation
  - Guidance for smaller scale collection programs
- Work with Leading by Example program to support compliance by state facilities
- Provide grants to public schools to comply
  - Equipment and technical assistance

# Medium Generators (continued)

- Proposed regulations to reduce waste ban threshold from 1 ton to  $\frac{1}{2}$  ton per week
  - Solid waste facility revised waste ban plans
- Waste ban inspections & enforcement
  - Lead with outreach and compliance assistance
- Support targeted investments in capacity
  - Intermediate processing facilities/de-packaging facilities
  - Expanded local and regional composting capacity

# Small Generators ( $< \frac{1}{2}$ ton/week)

- Municipal grants to support diverse approaches
  - Home composting bin distribution
  - Drop-off collection programs
  - Curbside collection
  - Municipal compost sites accepting food materials
- Recycling Dividends Program credits
- Partner with interested local business associations to develop local routes



# Market Development

- Work with OSD/MassDOT to increase use of compost products by state agencies
- Work with agricultural and landscaping sectors to identify additional market outlets for compost
- RecyclingWorks compost site technical assistance and workshops
  - Consider workshop focused on compost marketing
- MassDAR compost training workshops
- Assess market outlets for materials generated by AD facilities



# Next Steps

- <https://www.mass.gov/guides/commercial-food-material-disposal-ban>
- [Mass Food Systems Collaborative Local Food Action Plan](#)
- Send additional comments & suggestions to
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