

Solid Waste Advisory Committee Meeting Agenda – October 27, 2022

- Welcome/MassDEP Updates
- New Waste Ban Implementation: Status & Next Steps
- Recycling Market Development Update
- Deconstruction Workgroup Update
- C&D Update – MPS Status & Market Disruptions
- 2020 Solid Waste Data



MassDEP Updates

- Will be launching new Solid Waste Facility Workgroup
- Short term issues for discussion
 - Soils management relative to solid waste facilities
 - Discuss potential regulatory or policy changes
 - Closed landfill oversight – after initial 30-year period
 - Including monitoring, maintenance and financial assurance
- Expect to hold first meeting in December
- If interested in participating, contact Tom Adamczyk at Thomas.Adamczyk@mass.gov

New Waste Bans Implementation: Status & Next Steps

John Fischer

Why are these new 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
- Secondary Benefit
 - Support local economic and job growth through increased reuse and recycling

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

Waste Ban Waivers

- If have material subject to bans that requires disposal, can request one-time or short-term waiver
 - Need to document that no viable alternatives/why material requires disposal
 - Will need to know generator, amount, date(s), hauler, receiving facility
 - Issued to waste generator, copied to hauler & solid waste facility
- Contacts
 - Robert.Tocchio@mass.gov, sean.sylver@mass.gov

New Waste Disposal Bans

- Effective date of new bans - November 1, 2022
- Mattresses, textiles and reduced food waste threshold (from 1 ton to $\frac{1}{2}$ ton per week)

Food Waste Ban

- Food waste largest portion of MSW – about 1/5th
- Will add about 2,000 entities – restaurants are the sector with the largest increase
- RecyclingWorks Food Waste Estimator Tool
 - <https://recyclingworksma.com/food-waste-estimation-guide/>
- RecyclingWorks Technical Assistance and Guidance – www.recyclingworksma.com

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	1878

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 <math><1/2</math> 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

Textiles

- Dispose about 260K tons/year – about 5% of trash
- All types of textiles
 - Clothing, shoes, bags, towels, linens
- Textiles have value – can save money by diverting from disposal
- Must be clean and dry – if wet, moldy or oily, can and should be sent for disposal

Textile Collection Options

- Many active charity and private collection programs in Mass.
- Curbside and drop-off program models
- Uses include resale/donation/reuse, recycling (wiping cloths, furniture/car seat stuffing, carpet padding, insulation)
- Textile recovery organizations
 - <https://www.mass.gov/doc/textile-collection-organizations-operating-in-massachusetts-august-2022/download>

Mattresses

- About 600K mattresses/year – about 200K residential
- All size mattresses and box springs
- Includes foam mattresses
- Only 1-2% of mattresses not recyclable
- In-state capacity – 460K/year and growing
- Difficult to manage in solid waste - most solid waste facilities charge mattress fees at or above recycling cost
- State mattress recycling contract – FAC 90
- Additional mattress recyclers – www.recyclingworksma.com

Mattress Recycling Guidance

- <https://www.mass.gov/guides/mattress-recycling#-municipal-mattress-collection-&-recycling->
 - Includes state recycling contract information
- <https://www.mass.gov/guides/mattress-recycling#-waste-ban-compliance-assistance-for-municipalities->
 - Includes summary and detailed guidance on collection/recycling program options, example bill of lading, FAQ document

Contaminated Mattress Management

- If wet, moldy, or infested with bed bugs, document the number of mattresses, condition of each, and how stored and managed to prevent contamination.
- Not acceptable to store mattresses uncovered outside and then send for disposal because they are wet. Intentional contamination of waste ban materials is considered a waste ban violation.

Documentation Needed to Send for Disposal

- As long as materials stored & managed properly & documentation is maintained and provided to MassDEP upon request, unrecyclable mattresses can be sent for disposal without requiring a MassDEP waste ban waiver.
- Developing certification form to use to document contaminated/non-recyclable status to haulers and/or solid waste facilities
- Expect to have available by end of this week

Business and Institutional Assistance

- Recycling Works in Massachusetts
 - 888-254-5525
 - info@recyclingworksma.com
 - www.recyclingworksma.com
- Business Development Grants & Loans
 - Recycling & Reuse Business Development Grants
 - New grant round for collection of new waste ban materials
 - Recycling Loan Fund

Public Outreach Materials

- Social media toolkit on new waste bans for municipal officials
- RecycleSmart waste bans newsletter
 - <https://recyclesmartma.org/2022/08/waste-bans-101-less-trash-for-a-cleaner-mass-achusetts-newsletter/>
- New “Beyond the Bin” listing system beginning November 1 via RecycleSmart
 - <https://recyclesmartma.org/>

Solid Waste Facility Requirements

- If done not already, need to update waste ban plan and submit to MassDEP
 - This was due August 1, 2022
 - If transfer station (not C&D) only required to submit certification form
 - <https://www.mass.gov/doc/presentation-waste-ban-webinar-for-municipal-transfer-station-operators-july-2022/download>
- Waste ban web pages updated, includes:
 - Solid waste facility guidance and sample forms
 - Third party inspection forms

Outreach

- Have done extensive outreach and will continue to build on this over the coming months
- Short term upcoming events include:
 - MHOA Conference – October 27
 - Organics Subcommittee Meeting – November 1
 - <https://www.mass.gov/service-details/massdep-organics-subcommittee>
 - RecyclingWorks Forum – November 9
 - <https://recyclingworksma.com/events/fall-2022-forum-webinar/>

For More Information

- <https://www.mass.gov/guides/solid-waste-master-plan>
- <https://www.mass.gov/guides/massdep-waste-disposal-bans>
- <https://www.mass.gov/service-details/mattress-recycling>
- <https://www.mass.gov/guides/massdep-textile-recovery>
- <https://www.recyclingworksma.com>
- For more information
 - John Fischer, john.fischer@mass.gov

Recycling Market Development Workgroup and Recycling Business Grants

Claudine Ellyin

Recap of Meetings 1-5

- Meeting 1 – Intro
- Meeting 2 – Regional and National Perspectives
- Meeting 3 – Business Support & Economic Development Strategies
- Meeting 4 – Demand Side Strategies
- Meeting 5- Education, Outreach, Networking, and Information Sharing
- <https://www.mass.gov/service-details/massdep-recycling-market-development-workgroup>

Late Fall 2022/Winter 2023

- **WG #6: December 15, 2022 from 10 AM-1 PM**
 - Research and Development-Product Testing and Technology Development
- **Winter 2023:**
 - Jan/Feb 2023 Draft Action Plan
 - Spring 2023- Stakeholder Feedback on Draft Action Plan

RBDG 2022 Supplemental Grant Round: Collection

- Minimum grant award: \$25,000
- Maximum grant award per applicant: \$100,000
- Minimum financial match: 50%
- Eligible materials (Equipment to Collect):
 - Food
 - Mattresses
 - Textiles
- Eligible grant funded costs include (Purchases of):
 - Truck or other collection vehicle(s)
 - Collection containers
 - Equipment or software to increase route efficiency

RBDG 2022 Collection Grant

- [Apply for a Recycling & Reuse Business Development Grant | Mass.gov](#)
- **Deadline for submissions:
12/9/2022 (5:00pm)**

2020 Solid Waste Data Update

John Fischer

2019-2020 Summary

Table 2 Solid Waste Tonnage and Percent Change Summary: 2019 - 2020

	2019	2020	Tons Change	% Change
Disposal (Incl. Net Exports)	5,510,000	5,920,000	410,000	7.4%
In-State Disposal	3,860,000	3,700,000	(160,000)	-4.1%
Landfill	880,000	660,000	(220,000)	-25.0%
MSW	820,000	570,000	(250,000)	-30.5%
C&D	-	-	-	
Other	60,000	90,000	30,000	50.0%
Combustion	2,990,000	3,040,000	50,000	1.7%
MSW	2,970,000	3,020,000	50,000	1.7%
Non-MSW	10,000	20,000	10,000	100.0%
Net Exports	1,640,000	2,220,000	580,000	35.4%
Exports	1,970,000	2,470,000	500,000	25.4%
MSW	820,000	1,040,000	220,000	26.8%
Non-MSW	1,140,000	1,430,000	290,000	25.4%
Imports	330,000	250,000	(80,000)	-24.2%
MSW	310,000	240,000	(70,000)	-22.6%
Non-MSW	20,000	10,000	(10,000)	-50.0%

Note: Percent Change is calculated based on the rounded amounts in this table.

Percentages may not add exactly to 100 percent due to rounding.

MSW and Non-MSW Disposal

- MSW increased 2% from 2019-2020
 - 4,310,000 tons to 4,390,000 tons
- Non-MSW increased 28% from 2019-2020
 - 1,200,000 tons to 1,530,000 tons

Import/Export Data by State

Table 6 Disposal Import/Export Data by State (tons): 2019-2020					
MSW Exported			Non-MSW Exported		
State	2019	2020	State	2019	2020
AL	959	23,707	CT	748	0
CT	12,200	16,326	ME	209	0
ME	27,652	6,520	NH	316,587	310,291
MI	86	50,962	NY	80,288	130,346
NH	382,764	398,953	OH	637,121	971,996
NY	287,255	346,951	VA	13,097	14,784
OH	38,038	59,633	VT	95,794	0
SC	51,345	102,007	MI	0	282
VA	21,935	37,386			
GA		664			
TOTAL	822,234	1,043,109	TOTAL	1,143,844	1,427,699
MSW Imported			Non-MSW Imported		
State	2019	2020	State	2019	2020
CT	44,851	31,782	CT	5,033	3,900
ME	6	2,045	ME	1	30
NH	89,231	85,697	NH	14,992	6,834
NY	6,564	2,267	RI	628	1,391
RI	163,720	110,720	VT	16	19
VT	2,620	3,257			
TOTAL	306,992	235,768	TOTAL	20,670	12,174

MWC Ash Management

Table 7: Municipal Waste Combustor Ash Management (2020)				
Combustion Facility	Ash Disposed (tons)	Disposal Facilities	Pre-Combustion Metal Recovery (tons)	Post-Combustion Metal Recovery (tons)
Haverhill	158,877	Ward Hill, Haverhill	33	15,673
Millbury	205,219	Shrewsbury	74.38	9,711
North Andover	109,601	Shrewsbury		7,280
Pittsfield	2,534	Bondi's Island, Springfield		1,785
Saugus	786,825	Saugus, Shrewsbury		6,075
SEMASS	175,855	Bourne, Carver/Marion/Wareham	22,473	10,463
Springfield	34,487	Bondi's Island, Springfield		3,978
Totals	1,473,398		22,580.38	54,965

Ash Landfills Capacity

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Rail Transfer Capacity

Table 8: Summary of Rail Transfer Facilities

Facility Name	Region	Town	Current Status	Tons/Day	Tons/Year	Waste
Champion City Recovery	SERO	Brockton	Operating	1,000	286,000	C&D
Devens Recycling Center	CERO	Devens	Operating	1,500	390,000	MSW, C&D
Lenox Valley Waste Transfer Facility	WERO	Lenoxdale	Operating	250	67,250	MSW, C&D
McNamara Transfer Station	WERO	Springfield	Operating	699	181,740	MSW, C&D
New England Waste Disposal	SERO	Taunton	Operating	1,650	495,000	MSW, C&D
Tri-County Recycling	WERO	Ware	Operating	750	195,000	C&D
Trojan Recycling	SERO	Brockton	Operating	500	140,400	MSW, C&D
Upper Cape Regional Transfer Station	SERO	Falmouth	Operating	286	74,360	MSW, C&D
United Materials Management of Leominster	CERO	Leominster	Operating	1,000	300,000	MSW, C&D
Western Recycling	WERO	Wilbraham	Operating	645	312,000	MSW, C&D
Yarmouth-Barnstable Regional Rail Transfer Station	SERO	Yarmouth	Operating	530	137,800	MSW
Casella	WERO	Holyoke	Permitted	1,250	382,500	MSW, C&D
Howard Transfer Station	NERO	Roxbury	Permitted	810	-	MSW-
Wood Recycling, Inc.	NERO	Peabody	Permitted	1,350	-	MSW-C&D
Parallel Products of New England	SERO	New Bedford	Seeking approval	1,500	390,000	MSW, C&D
TLA Holbrook	SERO	Holbrook	Seeking Approval	1,000	260,000	MSW
Totals				14,720	3,612,050	

Disposal Facility Projections

Table 9: Projected Disposal Capacity 2020-2030 (Tons Per Year)															
Municipality	Permitted Capacity	End of current permitted capacity	Lifetime of LF	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Active Landfills															
Bourne	30,000	2021	2040	37,865	30,000	30,000	30,000	30,000	219,000	219,000	219,000	219,000	219,000	219,000	
Dartmouth	115,000	2024	2026	98,443	115,000	115,000	115,000	115,000	115,000	115,000	0	0	0	0	
Middleborough	60,000	2020	2031	58,569	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	
Nantucket	26,000	2029	2029	3,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	0	
Westminster	390,000	2020	2024	332,907	538,200	538,200	538,200	538,200	0	0	0	0	0	0	
Municipal Waste Combustors															
Agawam	131,400			106,103	131,400	131,400	-	-	-	-	-	-	-	-	
Haverhill	602,250			587,741	602,250	602,250	602,250	602,250	602,250	602,250	602,250	602,250	602,250	602,250	
Millbury	529,575			475,313	529,575	529,575	529,575	529,575	529,575	529,575	529,575	529,575	529,575	529,575	
North Andover	547,500			425,263	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	
Pittsfield	84,000			63,092	84,000	84,000	-	-	-	-	-	-	-	-	
Rochester	1,250,000			1,007,872	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	
Saugus	547,500			373,606	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500	
TOTAL PERMITTED COMBUSTION CAPACITY															
	3,518,225			3,038,990	3,692,225	3,692,225	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	
ADJUSTED TOTAL COMBUSTION CAPACITY															
				3,038,990	3,120,000	3,120,000	2,937,983	2,937,983	2,937,983	2,937,983	2,937,983	2,937,983	2,937,983	2,937,983	
TOTAL POTENTIAL CAPACITY LF&CMBST				3,663,400	3,889,200	3,889,200	3,707,183	3,707,183	3,357,983	3,357,983	3,242,983	3,242,983	3,242,983	3,216,983	
KEY:															
Permitted Capacity	Number without shading														
Potential Additional Cap:	Number with shading														
ESTIMATED TOTAL POTENTIAL AVAILABLE CAPACITY				3,700,321	3,889,200	3,889,200	3,707,183	3,707,183	3,357,983	3,357,983	3,242,983	3,242,983	3,242,983	3,216,983	
100% of potential for LFs and 85 % of potential for combustion															
Actual combustion varies per year, has never reached capacity															
Total Potential Landfill Capacity				661,331	769,200	769,200	769,200	769,200	420,000	420,000	305,000	305,000	305,000	279,000	
2020 capacity for MWCs is actual tonnage burned minus post combustion metal recovery.															
MWC disposal capacity is not a fixed tonnage amount, but rather a function of the facility's air permit and may vary slightly. Capacity projections assume Pittsfield and Springfield not available after 2022.															
2020 % Landfill Capacity	100%														
2015-2020 % Permitted Combustion Capacity Used	84.50%														
Average total combustion (last five years):															
	3120000														
Note: Bourne 189,000 of 219,000 tons of annual capacity dedicated to SEMASS ash disposal through 2024.															

For More Information

- <https://www.mass.gov/guides/solid-waste-master-plan#-solid-waste-data-updates->
- Catching up with 2021 Data – goal is to publish in early 2023