MassDEP Solid Waste Advisory Committee

November 7, 2024

10:05 – Working Group Updates

- Reduce and Reuse Workgroup
- C&D Subcommittee
- Organics Subcommittee
- Market Development Workgroup
- 10:50 Solid Waste Data Update
- 11:20 CET Annual Update
- 11:45 Open Discussion



MassDEP Reduce & Reuse Working Group Updates and Looking Ahead

MassDEP Solid Waste Advisory Committee Meeting November 7, 2024

MassDEP's Reduce & Reuse and Deconstruction Working Groups

2030 Solid Waste Master Plan

Reduce & Reuse Working Group

Reduce & Reuse Action Plan

December 2021

Deconstruction Workgroup

September 2022 Kick-Off

Priority Materials





Single-use Packaging



Building Materials







Textiles & Clothing



Electronics



Household Durable Goods



Business & Institutional Furniture, Fixtures and Equipment

Deconstruction Workgroup Meetings To Date

- September 2022: Demystifying Deconstruction
- ▶ **December 2022:** Inspiration and Practice: Taking Buildings Apart
- March 2023: Reuse Markets for Building Materials
- ▶ June 2023: Climate, Culture & Community: How Reusing Buildings Preserves Historic Spaces and Lowers Our Carbon Footprint
- October 2023: Deconstruction is Happening! How MA Practitioners Capture the Value of Building Materials Before Demolition
- ▶ January 2024: Pathway to Enable More Building Material Reuse & Deconstruction in MA
- ▶ July 2024: Workforce Development in Deconstruction

Recordings and presentations for all meetings can be found on MassDEP's website.



Next steps in Massachusetts...

Stay tuned!



Deconstruction site in Seaport District, Boston

Workshop/Charette: Planning in Progress!

Partnering with:

- Carpenters + Deconstruction Practitioners
- Municipal and Regional Planners
- Demo Contractors
- Solid Waste & Recycling Industry
- Historic Preservationists
- Reuse Organizations
- Architects/ Engineers/ Planners/ Owners
- Federal/ State/ Local Officials
- Building Officials

Best Management Practices For Reusable Food Service Ware

- Developed with stakeholder input.
- For local health officials and food service businesses.
 - Enable increased use of reusable service ware.
 - Ensure food safety and consistency with Food Code.
- MA Department of Public Health reviewing.
 - Will be made public soon.







Textile Recovery

- ► Textiles are a substantial part of our waste stream (> 5%).
- Valuable material demand is strong.
 - Capture for reuse/recycling at little to no cost.
- Waste ban in effect November 1, 2022.
- Support for textile recovery across range of MassDEP grant programs:
 - ► From market development to municipal programs serving residents.





Next Area of Focus: Bulky Items





Business & Institutional Furniture, Fixtures and Equipment



Reduce, Reuse, Repair Micro-Grants

- ► For short-term reuse and repair projects. <u>Up to \$10,000</u>.
- ▶ This year, we received a record number of applications.
 - ▶ 23 awarded, more than \$140,000 in grant funds.
- ► Nov. 15 deadline canceled next deadline TBD.

- Questions? Interested in applying?
 - ▶ Please review the grant guidelines on MassDEP's website.

Connect with us!



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Learn more and find previous meeting recordings:

MassDEP Reduce & Reuse Working Group



C&D Subcommittee Update

SWAC Meeting

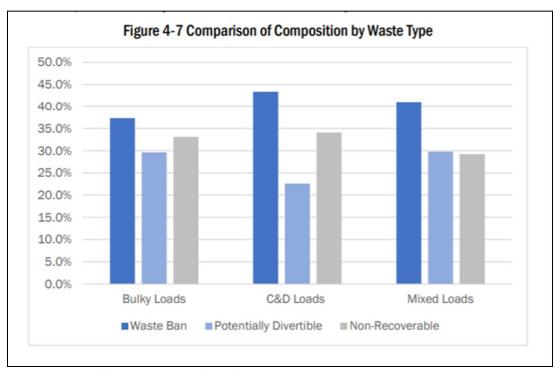
November 7, 2024

C&D Process Separation Rate incremental increases

Announced in July 2024 Update to C&D Minimum Performance Standard: https://www.mass.gov/doc/minimum-performance-standard-for-construction-demolition-handling-facilities/download

C&D Process Separation Rate incremental increases (announced July 2024)

- The most recent MassDEP 2022 Waste Characterization study documented >35% Waste Ban material content in all three types of C&D material loads (C&D, Bulky, and Mixed)
- Schedule of incremental increases in PSR minimum threshold:
 - 2020 = 15% (currently in effect)
 - 2025 = 20% (effective 1/01/2025)
 - 2027 = 23% (effective 1/01/2027)
 - 2030 = 25% (effective 1/01/2030)
- Tied to 2030 SWMP Goal to reduce disposal by 260,000 tons compared to 2018 baseline



https://www.mass.gov/doc/statewide-bulky-waste-characterizationstudy-june-2022/download

C&D facility annual report form improvements

C&D facility annual report form improvements

- Suggested improvements based on input from:
 - MassDEP observations/experience
 - Best practices in surrounding states
 - Construction managers observations/experience
- Conducted workshop with stakeholders 10/21/2024
 - Improve precision and accuracy of data
 - Achieve consistency through clear instructions
 - Modify forms and instruction documents
- Next Steps
 - Internal management review/approval in November/December
 - Publish revised forms/instructions by year end 2024
- Strive for continuous improvement
 - Evaluate effectiveness of revisions (mid-year 2025)

C&D Program Online Resources

- C&D Subcommittee: https://www.mass.gov/info-details/massdep-construction-demolition-subcommittee
 - Previous meeting materials saved under "C&D Subcommittee Archive"
- Managing C&D Materials Webpage: <u>https://www.mass.gov/lists/managing-construction-demolition-cd-wastes</u>
- C&D Action Plan: https://www.mass.gov/doc/cd-action-plan/download
- C&D Minimum Performance Standard: https://www.mass.gov/doc/minimum-performance-standard-for-construction-demolition-handling-facilities/download

For More Information:

Point of Contact:

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Food Waste Reduction Updates



Solid Waste Advisory Committee

John Fischer, MassDEP

November 7, 2024

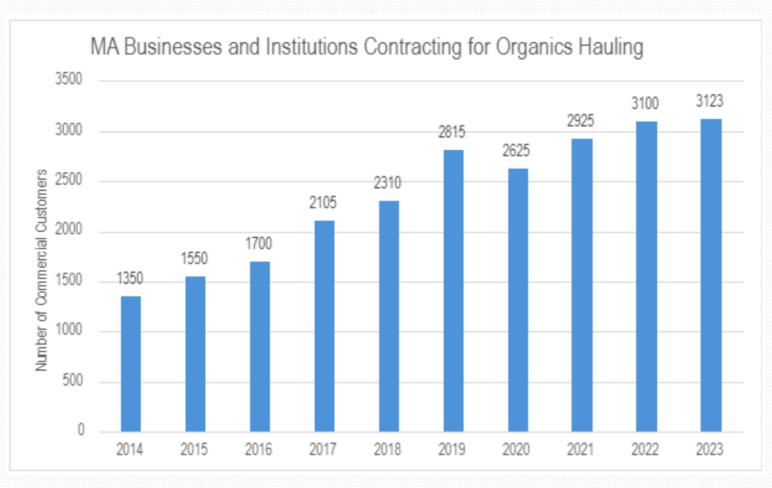
Goals and Capacity

- Food waste about 21% of our trash about 930K tons/year
 - Estimate 510K tons commercial/420K tons residential
- 2030 goal increase annual diversion by 500K tons over 2018 baseline of 280K tons
 - 78oK tons total
- Waste Ban Expectations
 - 2014 ban increase from 100k to 300k tons/year
 - 2022 ban includes about 100K addl. tons/year

Food Waste Diversion Data

Type of Use	2016	2,017	2018	2019	2020	2021	2022	2023
Anaerobic Digestion	48,234	87,856	159,563	187,947	211,215	175,264	217,180	239,370
Compost	79,586	52,991	42,321	40,569	33,038	25,273	31,931	26,499
Animal Feed	26,250	26,777	39,593	40,014	8,828	24,719	43,033	43,820
Food Donation	22,712	25,940	26,637	27,703	30,004	23,592	22,085	24,773
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Other	13,277	12,819	8,065	9,552	38,745	40,380	43,615	43,609
Rounded Total	190,000	210,000	280,000	310,000	320,000	290,000	360,000	380,000

Businesses Diverting Food Waste



Inspections and Enforcement

- Since November 2022 inspected >4,400 loads of trash
- Since October 2014 inspected 45,000 loads
- Issued 145 enforcement actions for "commercial organic material"
 - 131 notices of non-compliance
 - 14 consent orders with penalties (\$860-\$5,160)
- Have hired two new inspectors
 - Plan to increase from 134 to 224 inspections this year
 - About 4,500 loads of trash

Waste Ban Compliance

- Also issue "warning letters" based on load observations, facility data, or third party data
- Sending request for information letters to individual businesses in targeted sectors
 - So far letters to 50 companies with 700 locations
 - Requires to confirm compliance with waste ban
 - Requires MassDEP follow up and tracking
 - More rounds of letters in process

Supporting Programs & Policies

- RecyclingWorks in Massachusetts
 - Business assistance
 - More than 750 food waste assistance deliveries
 - Compost site assistance
- Recycling Business Development Grants and Recycling Loan Fund for food waste alone:
 - 17 loans for \$4.6 million
 - 17 grants for \$1.7 million
 - Another large grant round to be announced shortly

Residential – Activities to Date

- Municipal programs
 - 89 municipalities report some type of food waste collection program
 - 72 drop-off
 - 12 curbside
 - 5 both
 - These programs reported collecting 21,000 tons of food waste in 2023
 - 167 municipalities report selling home compost bins to residents
- Green Team equipment to schools
 - Distributed compost bins to 140 schools to set up on-site composting programs

Residential – Activities to Date

- Sustainable Materials Recovery Program (SMRP) Grants
 - \$1 million in grants
 - Supporting facility development & collection programs
- Recycling Dividends Program (RDP) Funding
 - Municipalities earned \$320,000 in RDP funds in 2024 from implementing organics programs
 - From 2021 to 2023, municipalities spent \$625,000 of RDP funds on food waste programs
- RecyclingWorks in MA Composting Assistance
 - Delivered technical assistance to 10 municipal compost sites

Future Program Focus

- Continue RBDG business grants & SMRP municipal grants for food waste reduction infrastructure
 - Focus on distributed capacity and collection capacity.
- Provide guidance on effective residential food waste reduction strategies
- Support growth of composting, particularly community scale operations, through Recycling Works in MA technical assistance
- Continue to distribute school composting equipment through the Green Team program
- Highlight food waste prevention benefits through RecycleSmart MA program, social media channels, and School Green Team

Factors to Consider for Potential Expanded Waste Ban

- Effectiveness of voluntary programs
- Cost-effectiveness of collection from smaller sources
- Ability of infrastructure to manage additional materials
- Potential increased contamination from small businesses and residents
- MassDEP ability to inspect and enforce effectively

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
- John Fischer john.fischer@mass.gov

Recycling Market Development

- Recap of Meetings 1-8 and Action Plan
- Recycling Business Guidance
- Recycling & Reuse Business Development Grant (RBDG)
- Recycling Loan Fund (RLF)
- Waste Reduction Innovation Grant

Recap of Meetings 1-8

- Meeting 1 Intro
 - MassDEP Market Development Programs
 - OSD Environmentally Preferable Purchasing
 - MassDevelopment
 - Mass Office of Business Development
- Meeting 2 Regional and National Perspectives
 - NERC and Circular Matters
- Meeting 3 Business Support & Economic Development Strategies
- Meeting 4 Demand Side Strategies
- Meeting 5 Education, Outreach, Networking, and Information Sharing
- Meeting 6 Research and Development
- Meetings 7 and 8 RMD Action Plan and External Presentations

https://www.mass.gov/service-details/massdep-recycling-market-development-workgroup

Action Plan Structure

- The recommended action items in this Plan are divided into three sections:
 - Business Support and Economic Development Strategies to Expand Recycling Market Infrastructure
 - 2. Strategies to Build Demand for Recycled Products
 - Research and Development Strategies for Products, Equipment, and Technologies

Recycling Business Guidance

- Recycling Business Guidance Document for Massachusetts
- General Business Guidance
- Support for Recycling and Waste Reduction Businesses
 - Applicable MassDEP Permit Requirements
 - Financial and Technical Assistance
 - Webinars and Workshops
 - Grants and Loans

RBDG

GRANT ACTIVITY	# AWARDS	AWARD AMOUNTS
Processing	47	6,873,343
Collection	29	1,632,137
Total	76	8,505,500

Total number of awards since 2016

RBDG

MATERIAL	# AWARDS	AWARD AMOUNTS
Food Waste	22	2,189,060
Mattresses	14	1,726,615
Textiles	12	1,058,132
Glass	7	1,400,000
C&D	7	860,000
Plastic	4	345,000
Reuse	4	323, 000
Food Donation	4	223, 250
Comingled Recyclables	1	300,000
Furniture	1	80,443
TOTAL	76	8,505,500

RLF

# of LOANS Since 1996	# BUSINESSES	LOAN TOTAL
89	60	\$20.3 million

Since program inception (1996)

RLF

MATERIAL	# AWARDS
Food/organic material	22
Recyclable paper	14
Plastics	11
Metal	10
C&D material	8
Electronics	7
Commingled recyclables	6
Textiles	2
Wood	2
Other material	4

Since program inception (1996)

Innovation Grant

- Program Focus and Goals
- Support adoption of new technologies that either:
 - Significantly expand processing capacity for example by increasing throughput
 - Provide a new end market for a problematic material/material with limited market outlets
 - Enable a higher value end market for a material
- Not focused on core existing technologies such as balers
- Considering smaller number of larger grants than RBDG

Innovation Grant

- Priority Materials
- Materials with limited outlets such as glass and wood
- Materials with additional market development opportunities – such as recycling outlets for textiles not reusable or asphalt shingles
- Materials problematic in the waste stream such as lithium batteries, bulky items such as plastics, furniture

Open Discussion

Next meeting – January 2025