Recycling Advisory Committee (RAC) Minutes
December 11, 2024, 8:00am – 9:30am
Minute Taker: Sakiko Isomichi
Hybrid Meeting

Members present: Dailey Brannin, Dave Demme, Debby Galef**,** Sakiko Isomichi, Debby Knight, Elka Kuhlman, Emily Lee, Carlie Peters, Dawn Quirk, Diane Roseman, Meera Singh, Helen Snively, Stephanie Wasiuk
Members Absent:, Lee Elliott, Tracie Gordon, Richard Nurse, Quinten Steenhuis, Rob Vandenabeele
Staff Present: Meryl Brott, Camilla Elvis, John Fitzgerald, Mike Orr
Public Present: Judy Nathans, Tamene Tedla, Amy Waltz

November minutes were voted on and passed.

Mike shared Massachusetts solid waste data - **see slides**

- Aggressive goals for 2050 published in 2021
- Bans on mattresses and textiles were added in 2022, to earlier food waste ban
- 5 target materials: food, cardboard, untreated wood, textiles, bulky materials
    - Almost half of the discarded materials can be diverted
    - Wood diversion targets: massive construction projects
        - Transfer stations under pressure/policy from the state to sort
- MA facilities
    - 5 permitted landfills
    - 5 combustion facilities
- Statewide waste characterization: almost 15% of recoverable paper
- Cambridge trash: 1/3 to NH landfill, 1/3 to Haverhill combustion, 1/3 to VA landfill via rail
    - Mattress recovery program – high cost but not as much benefit
        - The scale of change in reducing food waste is so much greater than recycling of mattresses

    - No metric to examine impact on waste storage vs. health/environment
- State offers a lot of grants and financing to reduce solid waste - UTEC, among others, has received one

How to message food waste diversion better?

- Alternatives to "compost"
    - Food to energy
    - Educate students about anaerobic digestion
    - Food to energy + fertilizer
    - State of the art now
    - Best option we've got
- Messaging
    - Build trust: DPW has done serious research and found this the best
    - Share EPA hierarchy & GLSD studies
    - Past survey: the general public is not struggling with the term compost
    - Separating food waste reduces climate emissions
    - Some people still don't compost. Why not?
        - Smell
        - Extra step
    - Tailor messages to different audiences
        - Trash doesn't stink anymore
        - Curb methane by composting
        - Anaerobic digestion doesn't emit as much CO2 as composting does
    - Meet people where they are
    - Increase access to program
    - Ask people the reasons why they don't separate food waste and what might help to make them change their minds

Action Item:

- Dawn will send out a poster on food waste

Update on Massachusetts Solid Waste

MassDEP 2020-2030 Solid Waste Master Plan

- Published in October 2021.
- Goals:
  - 30% trash reduction (from 5.7 million tons in 2018 to 4 million tons in 2030)
  - 90% trash reduction in disposal to 570,000 tons by 2050.
- Among its strategies for reaching these objectives, MassDEP is expanding its **waste disposal bans** by:
- Lowering the threshold on **commercial organic/food waste** to facilities generating more than one-half ton of these materials per week; and
- Adding **mattresses** and **textiles** to the list of materials banned from disposal or transport for disposal in Massachusetts.

SWMP 2010-2020: Published in 2013

- Goals: Reduce trash 30 percent by 2020, from 6,550,000 tons in 2008 to 4,550,000 tons by 2020.

What counts as “solid waste”?

- Waste from residents and businesses
- Waste from construction and demolition projects
- Counts all solid waste – whether disposed of in-state or out of state
- We dispose about 5.5 million tons/year
  - Almost 1 ton/person/year
  - (counting both residential & business waste)

Top 5 Target Materials

Material	Current Disposal	Additional Diversion (tons per year)
Food material	1,140,000	570,000
Cardboard	420,000	210,000
Untreated wood	270,000	135,000
Textiles	260,000	130,000
Bulky materials	390,000	130,000

2018-2023 Summary

Table 3 Solid Waste Disposal 2018-2023 (all data in tons)								
			2018	2019	2020	2021	2022	2023
Disposal			**5,660,000**	**5,510,000**	**5,920,000**	**6,220,000**	**6,000,000**	**6,160,000**
	Landfill		**1,270,000**	**880,000**	**660,000**	**600,000**	**490,000**	**460,000**
		MSW	1,190,000	820,000	570,000	490,000	410,000	380,000
		C&D	0	0	-	-	0	-
		Other	70,000	60,000	90,000	110,000	80,000	70,000
	Combustion		**3,200,000**	**2,990,000**	**3,040,000**	**3,060,000**	**2,930,000**	**2,990,000**
		MSW	3,180,000	2,970,000	3,020,000	3,060,000	2,900,000	2,960,000
		Non-MSW	20,000	10,000	20,000	10,000	20,000	30,000
	Net Exports		**1,190,000**	**1,640,000**	**2,220,000**	**2,570,000**	**2,590,000**	**2,710,000**
		Exports	1,820,000	1,970,000	2,470,000	2,920,000	2,890,000	3,040,000
		MSW	750,000	820,000	1,040,000	1,050,000	1,380,000	1,610,000
		Non-MSW	1,070,000	1,140,000	1,430,000	1,870,000	1,500,000	1,440,000
		Imports	630,000	330,000	250,000	360,000	300,000	340,000
		MSW	610,000	310,000	240,000	300,000	230,000	270,000
		Non-MSW	20,000	20,000	10,000	50,000	80,000	70,000

Disposal Facility Projections

Table 9: Projected Disposal Capacity 2024-2030 (Tons Per Year)										
Municipality	**Permitted Capacity**	**End of current permitted capacity**	**Lifetime of LF**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Active Landfills										
Bourne	30,000	2024	**2040**	30,000	219,000	219,000	219,000	219,000	219,000	219,000
Dartmouth	115,000	2024	**2028**	115,000	115,000	115,000	115,000	115,000	0	0
Middleborough	60,000	2031	**2031**	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Nantucket	26,000	2029	**2029**	26,000	26,000	26,000	26,000	26,000	26,000	0
Westminster	538,200	2030	**2030**	538,200	538,200	538,200	538,200	538,200	538,200	538,200
Total Permitted Landfill Capacity				**769,200**	**958,200**	**958,200**	**958,200**	**958,200**	**843,200**	**817,200**
Adjusted Total Landfill Capacity				**611,138**	**761,301**	**761,301**	**761,301**	**761,301**	**669,932**	**649,275**
Municipal Waste Combustors										
Haverhill	602,250			602,250	602,250	602,250	602,250	602,250	602,250	602,250
Millbury	529,575			529,575	529,575	529,575	529,575	529,575	529,575	529,575
North Andover	547,500			547,500	547,500	547,500	547,500	547,500	547,500	547,500
Rochester	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			547,500	547,500	547,500	547,500	547,500	547,500	547,500
Total Permitted Combustion Capacity	*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				*3,018,041*	*3,018,041*	*3,018,041*	*3,018,041*	*3,018,041*	*3,018,041*	*3,018,041*
TOTAL POTENTIAL INSTATE DISPOSAL CAPACITY				**3,629,179**	**3,779,341**	**3,779,341**	**3,779,341**	**3,779,341**	**3,687,972**	**3,667,315**
KEY:										
Permitted Capacity	Number without shading									
Potential Additional Capacity	Number with shading									
79% of permitted LF capacity used and 87 % of available potential combustion capacity used for purposes of projecting capacity.										
Actual combustion varies per year, has never reached total permitted capacity										
MWC permitted capacity is not a fixed tonnage amount, but rather a function of the facility's air permit and may vary slightly.										
2023 % Landfill Capacity used	79%									
2023 % Permitted Combustion Capacity Used	87%									
Note: Bourne 189,000 of 219,000 tons of annual capacity dedicated to SEMASS ash disposal through 2024.										

Capacity & Net Export Projections

Table 10: Waste Management Capacity Projections: 2024-2030							
	2024	2025	2026	2027	2028	2029	2030
Total Disposal (baseline)	6,156,847	6,156,847	6,156,847	6,156,847	6,156,847	6,156,847	6,156,847
Total Disposal (reduced)	5,788,668	5,442,505	5,117,043	4,811,044	4,523,344	4,252,848	3,998,528
Combustion Capacity	3,018,041	3,018,041	3,018,041	3,018,041	3,018,041	3,018,041	3,018,041
Potential LF Capacity	611,138	761,301	761,301	761,301	761,301	669,932	649,275
In-state Disposal Capacity	3,629,179	3,779,341	3,779,341	3,779,341	3,779,341	3,687,972	3,667,315
Net Disposal Export (baseline disposal)	2,527,668	2,377,506	2,377,506	2,377,506	2,377,506	2,468,875	2,489,532
Net Disposal Export (reduced disposal)	2,159,489	1,663,164	1,337,702	1,031,703	744,003	564,875	331,212
Assumptions for Annual Percent Change:							
Baseline Disposal Tonnage	0.0%						
Decreased Disposal Tonnage/year	5.98%						

Statewide Waste Characterization

Weighted Average by Material Category	2010 Winter/Fall	2013 Spring/Summer	2016 Winter/Fall	2019 Spring/Summer	**2022 Winter/Fall**
Paper (ALL)	25.8%	24.7%	21.7%	21.0%	**21.8%**
Uncoated Corrugated Cardboard/Kraft Paper	8.7%	7.3%	9.2%	5.4%	5.8%
Waxed Cardboard	1.0%	0.6%	0.3%	0.4%	0.5%
High Grade Office Paper	1.1%	1.1%	0.5%	0.5%	0.5%
Magazines/Catalogs	1.7%	1.3%	0.8%	0.6%	0.4%
Newsprint	1.9%	1.4%	0.7%	0.7%	0.3%
Other Recyclable Paper	3.6%	3.5%	3.6%	3.0%	3.9%
Compostable Paper	6.2%	7.8%	5.8%	8.7%	7.2%
Remainder/Composite Paper	1.6%	1.7%	0.7%	1.7%	3.2%
Plastic (ALL)	13.9%	14.4%	13.1%	15.9%	**15.0%**
Recyclable plastic					3.0%
Expanded Polystyrene Food Grade	0.5%	1.0%	0.4%	0.4%	0.4%
Expanded Polystyrene Non-food Grade	0.2%	0.2%	0.2%	0.1%	0.2%
Bulk Rigid Plastic Items	2.7%	2.2%	1.6%	0.9%	1.8%
Film (non-bag clean commercial and industrial packaging film)	0.5%	1.3%	0.5%	0.8%	1.0%
Grocery and other Merchandise Bags	0.9%	0.7%	0.5%	0.6%	0.3%
Other Film means plastic film	3.7%	4.4%	4.8%	6.5%	5.7%
Remainder/Composite Plastic	3.2%	1.8%	2.8%	3.5%	2.5%
Metal	5.5%	3.9%	3.8%	4.0%	**4.8%**
Glass	2.1%	1.9%	1.6%	2.7%	**2.3%**
Food Waste	15.1%	18.8%	26.0%	21.5%	**21.6%**
Construction and Demolition (in the MSW stream)	13.9%	12.7%	15.0%	14.3%	**12.1%**
Electronics	3.3%	1.6%	1.1%	0.8%	**0.4%**
Textiles	4.9%	5.2%	5.8%	4.3%	**5.2%**
Bulky Materials	3.2%	2.9%	0.8%	2.6%	**2.2%**
Mattresses	N/A	N/A	0.1%	0.3%	**0.1%**

More info:

- https://www.mass.gov/info-details/massdep-solid-waste-advisory-committee
- https://www.mass.gov/guides/solid-waste-master-plan#-solid-waste-data-updates-