## Proposed Waste Ban Changes



Solid Waste Advisory Committee January 23, 2020

# Draft 2030 Solid Waste Master Plan

- Proposed minimum performance standard for waste ban compliance by construction & demolition (C&D) handling facilities
- Proposed 3 additional waste ban materials
  - Commercial organic material (food material)
    - lowering threshold from 1 ton to ½ ton/week
  - Mattresses
  - Textiles

- Guidance on minimum performance standard for waste ban compliance by C&D facilities
- Current separation of materials ranges from 46% to 1%
- Goals
  - level playing field
  - ensure all C&D material processed effectively reduce leakage
  - increase separation of banned and other recyclable materials for recycling

- Must meet process separation rate of at least 15%
- And separate all banned materials to greatest extent possible
- If do not meet standard, cannot send material for disposal and must transfer to processor that meets standard
- Denominator includes all material accepted (except for MSW and processed residuals)
- Numerator includes source separated materials received

- Expect to issue guidance shortly
- Will apply based on annual reports
  - Publish data 6 months after end of reporting year
  - Will take effect for reporting year 2020 effective June 2021
  - Will update facility operating permits and waste ban compliance plans to be consistent with this guidance
  - Enforcement would be for failure to comply with waste ban compliance plan

- Ways to comply
  - Increase separation of banned & other recyclable materials
  - Accept more source separated materials
  - Only accept residual materials from another processor that meets standard
  - Transfer outgoing material to processor that meets standard

## Other Potential Waste Ban Implementation Changes

- Facility waste ban compliance plans
  - For facilities > 50 tons per day:
    - Require dedicated waste ban monitor (beyond loader operator)
  - Loads with C&D materials above action levels may not be accepted and disposed
    - Must either separate banned materials or transfer to processor
  - Zero tolerance materials must be separated whenever observed
  - Specifically address how will separate cardboard for recycling

#### Food Material Waste Reduction

- Increased from 100K to 280K tons in 2018
- # businesses diverting up from 1,350 to 2,300 in 2018
- 32 NONs and 5 penalties in 2019
- > 50% growth in food rescue since 2014
- > 1 million tons disposed in trash annually
  - About 55% commercial = 640 K tons
  - About 45% residential = 520K tons
- Draft SWMP goal reduce food waste by 500K tons/year (beyond current 280 K tons/year)

## Food Materials Capacity

- > 600K tons AD in place/under development
- About 150K tons compost capacity
- Additional capacity for animal feed
- Further increases in food rescue/donation
- Potential to reduce food waste at source by 50 percent or more
- Potential capacity needs
  - Fill in some regional gaps reduce hauling distances
  - Intermediate processing capacity ability to screen and remove contaminants
  - Continue to build route density

## Projected Ban Effects

- Double # businesses subject –about 2,000 additional
- 600 K tons of business food waste disposed in trash
- 200K tons through ban & supporting strategies
  - 100K additional tons subject
  - plus improved compliance from businesses subject now
- Restaurants are sector most affected about 1,300
- About 30 public schools potentially subject
- RecyclingWorks in MA technical assistance
- Update Organics Action Plan
  - Organics Subcommittee meeting February or March

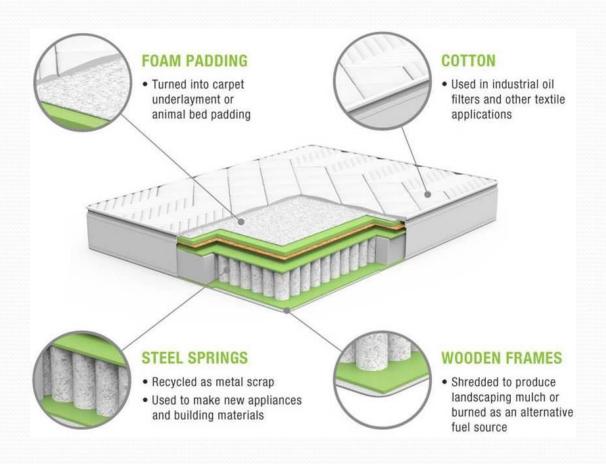
Sector	Businesses generating over 1 ton of food waste/week	Businesses generating over ½ ton of food waste/week	Percent of business sector subject to proposed waste ban
Hospitals	77	158	60%
Nursing Homes and Residential Facilities	8	39	4%
Full Service Restaurants	850	1,659	17%
Limited Service Restaurants	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%
Total	2,891	4,769	

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
Total	958,670	1,056,445

## Mattress Recycling Progress

- 600K mattresses/year total (about 200K residential)
- About 16K tons
- Current recycling > 50K units/year (not including commercial)
- About 90 munis. currently recycling via state contract

## **Mattress Components**



## Mattress Recycling Infrastructure

- MassDEP municipal recycling grants, state contract and recycling business grants
- 4 vendors on state contract
- Current capacity about 300K pieces/year likely growing
- Processing costs \$10-16/piece
  - Typical disposal surcharges at this amount or higher
- Haul costs \$150-500/container
- Difficult to manage at disposal facilities

# Textile Reuse and Recycling Infrastructure

- About 23oK tons disposed/year
- About 95% can be reused or recycled
- >25 reuse or recycling operations in Mass.
- Many more involved in resale
- >1/2 of munis. have collection programs many through schools

#### Value of Textiles

- Reduced disposal costs
- But also have value
- 45% sold as second hand apparel;
- 30% turned into industrial wiping cloths;
- 20% to fiber products (insulation, carpet padding, sound-proofing);
- Local businesses "upcycle" textiles into new products, (e.g., quilts, blankets, and bags)

### Next Steps and Schedule

- Developing draft regulations package now
- Potential effective date of fall 2021 subject to input and discussion
- Key questions
  - What questions or concerns do these potential additional bans raise?
  - Do you feel the needed infrastructure is in place (or will be)?
  - What steps should MassDEP take to support additional waste bans?