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FREE ASSISTANCE FOR BUSINESSES & INSTITUTIONS

RecyclingWorks MA is funded by Massachusetts Department of Environmental Protection (MassDEP),
delivered under contract by the Center for EcoTechnology



recyclingworksma.com



Massachusetts Waste Disposal Bans

Commercial Food Material

Applies to businesses & institutions generating 0.5 tons or more food material per week

Textiles & Mattresses & Box Springs

Cardboard & Paper

Metal, Glass, and Plastic Containers

Construction & Demolition Materials

Yard Waste

White Goods

recyclingworksma.com/waste-bans-and-compliance/



One-half ton of food waste fills approximately four of these 64-gallon carts.

	Average Measurement	
Meals Served [Full-Service]	1	lbs/meal
Meals Served [Limited-Service]	0.5	lbs/meal
Employees [Full-Service]	3,000	lbs/employee/year
Employees [Limited-Service]	2,200	lbs/employee/year
Disposed Waste ¹ [Full-Service]	66	% of disposed waste by weight
Disposed Waste ¹ [Limited-Service]	51	% of disposed waste by weight



Estimating Food Waste Generation

recyclingworksma.com/food-waste-estimation-guide



RecyclingWorks Hotline 888-254-5525

More than 1,700 phone & email inquiries

MassDEP Waste Ban
Amendments

Textiles and
Mattresses

Colleges & Universities
K-12 Schools

Furniture and
Equipment Reuse

Construction, Demolition,
and Building Materials

Hard-to-recycle
Materials

No-Cost Technical Assistance

Evaluate existing waste streams

Identify opportunities to prevent, recover, and divert waste

Employees education and training

Customized waste bin signage

Cost analysis for starting or expanding a waste diversion program

Connect with waste haulers and processors

Implementation assistance



Updated Website Resources

For Property Managers

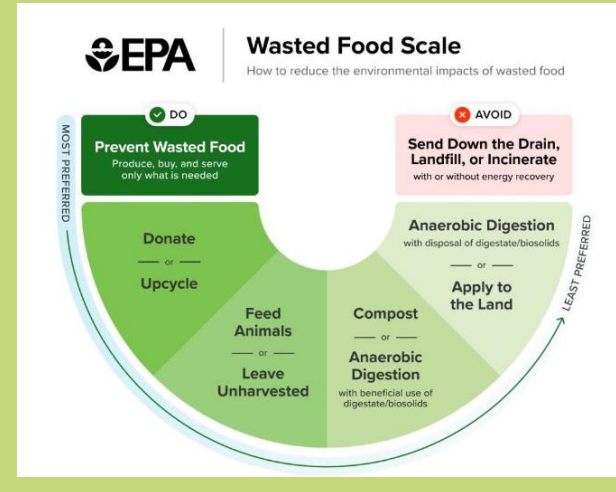
Collecting Mattresses and Textiles for Reuse and Recycling

On November 1 2022, the MassDEP added textiles and mattresses to the list of materials that are banned from disposal. Most textile material, including apparel, linens, and other fabrics, and mattress components, such as wood, scrap metal, and foam can be recovered for reuse, repurposing, or recycling. Contact RecyclingWorks for a customized list of reuse organizations, recyclers, and haulers in your area.

Textiles – It is important to collect and recover textiles separately, as they do not belong in recycling containers of any kind and can cause equipment damage and worker safety challenges at recycling facilities. For residential properties, consider facilitating monthly or seasonal donation collection pick-ups with a **local organization**. Some commercial tenants, such as clothing retailers, may also generate textiles. If your property includes multiple businesses that generate textiles, consider siting one or more collection containers for shared use.

Mattresses (including foundations or box springs) – There is a growing infrastructure for recycling in Massachusetts, and many **mattress recyclers offer pick-up services**. Consider a closed or covered container, particularly if there is a season when your property has a large number of move-outs. Many Massachusetts municipalities offer **mattress recycling programs** including drop-off options that residents of multifamily properties can access. These programs typically do not provide pick-up options for private multifamily properties.

recyclingworksma.com/how-to/business-sector-guidance/property-managers/



C&D Materials Guidance

This guidance is intended to provide guidelines for contractors, architects, and property owners interested in increasing C&D reuse and recycling. The scope of this guidance covers a range of types of projects and project scales. It covers deconstruction, demolition and renovation projects, the reuse of building materials and donation of usable materials, on-site source separation of C&D material, and mixed C&D recycling.



Massachusetts Waste Bans

In 1990, the Massachusetts Department of Environmental Protection (MassDEP) introduced its first bans on landfilling and combustion of easy-to-recycle and toxic materials. Additional “**waste bans**” have been phased in over time. The following materials and items, which may be encountered in construction, demolition, or renovation projects, are prohibited from disposal and/or transfer for landfills in Massachusetts:

Asphalt pavement, brick & concrete (ABC)

Aluminum and non-ferrous metal

Painted & untreated wood & wood waste (banned from landfills only)

Plaster and gypsum wallboard

Non-recyclable paper, cardboard & paperboard

Refrigerators and other large appliances

recyclingworksma.com/construction-demolition-materials-guidance/

Food Waste Estimation Guide

What is Commercial Organic Material as defined by the waste ban?

Food Material
Includes but is not limited to: fruits, vegetables, grains, fish, and animal products and byproducts.

Vegetative Material¹
Plant material

¹ Leaf and yard waste is covered under a separate existing waste ban.

General Conversions

1 ton = 2,000 lbs

Commercial-industrial waste
1 yd³ (cubic yard) = 250 to 300 lbs

Food scraps
55 gallons = 200 to 450 lbs

Based on EPA's standard volume-to-weight conversions.

recyclingworksma.com/food-waste-estimation-guide/

New Business Spotlights

Blog Post

Historic Legacy with a Bold Future: Spotlight on Bombyx Center for Arts and Equity's Sustainable Initiatives

Cassie Rogers | April 2, 2024

Located on Pine Street in the heart of Florence, Bombyx Center for Arts and Equity is a vibrant hub that enriches the community and carries on the building's legacy of activism through their performance venue. Also known as the Florence Congregational Church, the historic building operates two houses of worship, a performance art space, a daycare, and a preschool.



In alignment with their commitment to innovation and caring for the future, the Executive Director of Bombyx, Cassandra Holden, enlisted support from RecyclingWorks in Massachusetts (RecyclingWorks) to help implement a food scrap collection program. The Reform Synagogue, Beit Ahavah, also participated as a partner in establishing the waste program. The new program is poised to divert 2.5 tons of food waste annually.

The kitchen is used for both the building's own events and as a prep space for several food trucks. Because of all these activities, it is clear why Bombyx needs a strong and efficient waste

Blog Post

Reducing Waste One Dumping at a Time: Mei Mei's Sustainability Initiatives

Cassie Rogers | May 15, 2024

Mei Mei Dumplings, located in South Boston, is setting a great example for sustainable business practices. Since opening their doors in 2012, Mei Mei has been dedicated to reducing waste and minimizing their environmental impact.



Mei Mei has always been passionate about diverting food scraps, and through a partnership with **CERO** they've implemented a comprehensive food scrap separation program. While they do use compostable materials in their front-of-house operations, Mei Mei focuses on training their back-of-house staff to prevent contamination, ensuring that their source separated kitchen

food scraps are a high-quality stream. With a conveniently placed food scraps bin in the kitchen at their new location and with thorough staff training, they've made it easy for their staff to do the right thing.

Blog Post

Simmons University's Deconstruction Project: A Timeline for Success

Olivia | August 10, 2023

A green demolition project at **Simmons University** in Boston recovered over a dozen tons (24,000 pounds) of material including furniture, fixtures, and glassware items.

This massive reuse undertaking emerged from the remodeling of the University's Park Science Center.



The project entailed one year's worth of planning and coordination among Simmons University staff, **Elkus Manfredi Architects** (and their dedicated team of staff volunteers), the **City of Boston**, **Skanska**, **The Carbon Leadership Forum of Boston - Reuse Group**, and **RecyclingWorks in Massachusetts** (RecyclingWorks), making up "The Reuse Team".

Advanced planning is key to the success of material reuse and deconstruction projects. The timeline that The Reuse Team has followed so far is shown below. This timeline can serve as a model for other institutions and businesses planning for similar projects.



recyclingworksma.com/blog/

Johnny's Luncheonette Case Study

We compost with

BLACK EARTH COMPOST
and you can too!

Food scraps from our community are composted and used to nourish the soil and plants in these planters.

Visit blackearthcompost.com



Educational signage for staff and customers

Collects 600-700 pounds of food scraps per week for composting

Reduced nuisance conditions in trash area



Restaurant Composting Case Study Johnny's Luncheonette

A diner that has been adored by residents of Newton for 25 years, [Johnny's Luncheonette](#) offers breakfast, lunch, and dinner in a bright atmosphere with retro decor. When the current owners, Kay and Kevin Masterson, took over in 2014, they expanded the restaurant's sustainability efforts and elevated its classic diner fare to include locally-sourced ingredients. Johnny's Luncheonette is fondly referred to as the "Anytime Place for Everyone," representing the establishment's commitment to its diverse community partnerships. Along with supporting nearby farms through their intentional procurement, the diner works with local organizations to develop children's placemats that feature activities to increase consumer knowledge of sustainability, local history, and food systems, all of which encourage diners to think about how food arrives on their plate and where their leftovers end up. Johnny's thoughtful approach to their menu—which includes all-day breakfast, locally-caught white fish, nostalgic matzoh ball soup, and other treats—is not limited to their preparation and ingredients, but also encompasses responsible waste management.

At A Glance

- Johnny's Luncheonette is a charming diner in Newton with a robust recycling system and a food scrap collection program for composting.
- The diner's creative children's placemats and patio signage offer guests the chance to engage with information related to local sustainability.
- The diner collects 600-700 pounds of food scraps per week, which are composted by Black Earth Compost. Thanks to this partnership, food waste is recovered for its nutrients instead of discarded.
- Since implementing their new food scrap diversion program, Johnny's Luncheonette has showcased their composting efforts to customers and provided a positive example for their business neighbors. Johnny's is determined to minimize their environmental impact and works with local stakeholders in their efforts to do so.

info@recyclingworksma.com | recyclingworksma.com | (888) 254-5525

RecyclingWorks in Massachusetts is a recycling assistance program funded by the Massachusetts Department of Environmental Protection and delivered under contract by the Center for EcoTechnology that helps businesses and institutions reduce waste and maximize recycling, reuse, and food recovery opportunities.



Outreach and Program Awareness

7,516 Monthly newsletter subscribers

16 Blog posts

33 Events reaching over 1,117 people

1,298 Followers on Facebook and Twitter (X)

Chambers of Commerce, Industry Associations, Business Organizations



RecyclingWorks Newsletter | August 2023

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Seeking participants for reusable takeout container stakeholder meetings!

On behalf of the Massachusetts Department of Environmental Protection (MassDEP) and the Massachusetts Department of Public Health (DPH), RecyclingWorks is coordinating a series of meetings that will inform the development of guidance on how restaurants, colleges and universities, and other food service entities can transition away from single-use foodware containers to reusable containers.

Website Data

In FY24, there have been 234,855 visits to the RW website.

Most visited pages during FY24:

1. Recyclers – Search Results: 32,468 views
2. Recycling Assistance for Businesses & Institutions (homepage): 31,156 views
3. Recycling Mattresses: 9,957 views
4. Recycling Textiles: 6,726 views
5. Construction Materials: 5,731 views
6. About the Find-A-Recycler-Tool: 5,631 views
7. Food Waste Estimation Guide: 3,701 views
8. Recycle Electronics: 3,685 views
9. Recycle Pallets: 3,555 views
10. About RecyclingWorks: 3,521 views



Best Management Practices for Reusables in Food Service

Update

SOURCE REDUCTION OF FOOD WASTE GUIDANCE

The US EPA's **Food Recovery Hierarchy** ranks source reduction at the top of its priorities as a strategy to reduce wasted food. Businesses should consider how each strategy on the EPA hierarchy can contribute to a comprehensive food waste reduction plan. While this guidance focused on preventing food waste, other RecyclingWorks guidance addresses **food donation** and **source separation** of food material for composting, anaerobic digestion or animal feed.



Why should my business reduce food waste?

- Waste Tracking
- Meal Planning
- Food Purchasing and Procurement
- Reduction Strategies
- Back of House

Find A Recycler

Choose A Material

Any Material

Location

Enter location

50 mi

Pick Up/Drop Off

Pick Up/Drop Off

Keyword

OR, try a keyword or biz name

FOOD DONATION GUIDANCE

The RecyclingWorks in Massachusetts program has worked with state and local health officials, food rescue organizations, food banks, and organizations with established food donation programs to develop this Food Donation guidance document by holding three stakeholder meetings across the state in Springfield (March 25, 2015), Worcester (April 9, 2015) and Boston (April 29, 2015). The information gained from the meetings was used to create this guidance document.

The US EPA's Food Recovery Hierarchy ranks feeding hungry people near the top of its priorities as a strategy to reduce wasted food. Businesses should consider how each strategy on the EPA Hierarchy can contribute to a comprehensive food waste reduction plan.



This document is intended to provide guidance to organizations interested in establishing Food Donation programs by offering a broad overview of how successful food donation programs

Find A Recycler

Choose A Material

Any Material

Location

Enter location

50 mi

Pick Up/Drop Off

Pick Up/Drop Off

Keyword

OR, try a keyword or biz name

SOURCE SEPARATION GUIDANCE

The RecyclingWorks in Massachusetts program has worked with local health officials to develop recommended Best Management Practices (BMPs) for use by health agents to support and inform local oversight of commercial food waste collection programs. The commercial organics waste disposal ban affects any business or institution that disposes of one ton or more of food waste per week, effective October 1, 2014. Effective November 1, 2022, the MassDEP is lowering the threshold for the commercial organics ban so that it applies to businesses and institutions generating one-half ton or more food waste per week. These BMPs are also intended to serve as a resource to businesses and institutions and their haulers. This is not regulatory language and these practices may need to be modified to fit varying site specific conditions. The RecyclingWorks program will consider revising the BMPs in the future as needed. Any suggestions should be sent to info@recyclingworksma.com.

Kitchen Separation

Recommended practices for source separation, starting in the kitchen

Find A Recycler

Choose A Material

Any Material

Location

Enter location

50 mi

Pick Up/Drop Off

Pick Up/Drop Off

Keyword

OR, try a keyword or biz name

recyclingworksma.com/source-reduction-guidance/

recyclingworksma.com/donate/

recyclingworksma.com/local-health-department-guidance-for-commercial-food-waste-separation/

Process Overview & Goals

- Developing recommended best management practices (BMPs) for use of reusable food service ware.
 - For use by local health officials and food service businesses.
 - Enable increased use of reusable service ware.
- Ensure food safety and consistency with Food Code.



Process Overview

- First stakeholder meeting held October 12, 2023
- Second stakeholder meeting December 7, 2023
- RecyclingWorks conducted 12 1-on-1 meetings
- RecyclingWorks incorporated input from stakeholder meetings and 1-1's into outline and submitted to MassDEP and MassDPH for feedback
- MassDEP and MassDPH feedback and outstanding questions incorporated
- **Developing into draft document to share with stakeholders for comment**
- Publish and share revised BMPs
- Update in future, as needed

Key Stakeholders Include:

State, Local and Regional Public Health Officials

Restaurant Owners and Other Food Services Professionals

Reusable Container/Service Providers

Environmental Advocacy Organizations



Three distinct scenarios have emerged

1. Establishment-provided containers for take-out
2. Consumer-provided beverage containers for take-out
3. Consumer-provided containers for bulk retail use



Food Code, Guidance and other Inputs

Massachusetts Merged Food [Code](#) 105 CMR 590 adopted 11/16/18

[Guidance document for Safe Use of Reusable Containers](#) approved at national

2023 Biennial Conference for Food Protection Meeting

Other guidance, e.g. [Reusable Container Quick Start Guidance](#) from

Circular Philadelphia and Echo Systems


Variance examples

Local interpretation

Establishment-Provided Reusable Containers

- *Container selection*
 - National Sanitation Foundation food grade durable, designed for reuse, commercial dishwasher safe
- *Filling methods*
 - Employee fills reusable container behind the counter/back of house in food preparation area avoiding cross-contamination
 - Employee serving food for dine-in, providing consumer with the reusable container for leftovers
- *Collecting returned containers*
 - Monitored location away from food preparation areas
 - Containers are regularly collected for cleaning
- *Washing and sanitizing*
 - Same requirements and washing procedures as for other durable dishware/containers used on-site

1 Purchase FDA-approved reusable containers.




(Reusable containers should be certified according to the NSF Protocol P386: Food Storage Containers for Home Use.)

Container Requirements

- Made of durable material (not cardboard or single-use)
- Corrosion resistant
- Non-absorbent
- Chip and scratch resistant
- Designed to prevent food from harboring/collecting bacteria
- Commercial dishwasher safe

2 Implement proper washing and drying procedures.



For more information: See full guidelines document on Circular Philadelphia [website here](#).

FDA Washing and Drying Guidelines **DAILY BASIS**

Automated

- Must automatically dispense detergent & sanitizer
- Minimum wash tank temps:
 - 150°F - 165°F (high temp sanitization)
 - 120°F (chemical sanitization)
- Minimum final rinse temp (high temp sanitization): 180°F

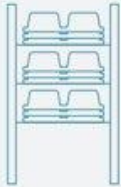
Manual

- Use triple basin. One sink for:
 - Washing (detergent required)
 - Rinsing
 - Sanitizing
- Minimum wash sink temp: 110°F
- Fully submerge ware in chemical sanitizer sink for 7-30 seconds depending on type of chemical

Drying

Containers **MUST** be fully air dried before stacking to prevent pathogenic growth.

3 Set up sanitary storage and distribution systems.



Storage Guidelines

- Rinse containers from customer to leave as little food residue as possible until washing.
- After cleaning, transport and store all reusable wares to ensure complete drainage.
- Store dry reusables inverted, if possible, on or in NSF-certified racks or bins (enclosed, if possible) to protect from contamination.

Source: Circular Philadelphia Quickstart Guide

What we've heard so far...

Establishment-Provided Reusable Containers

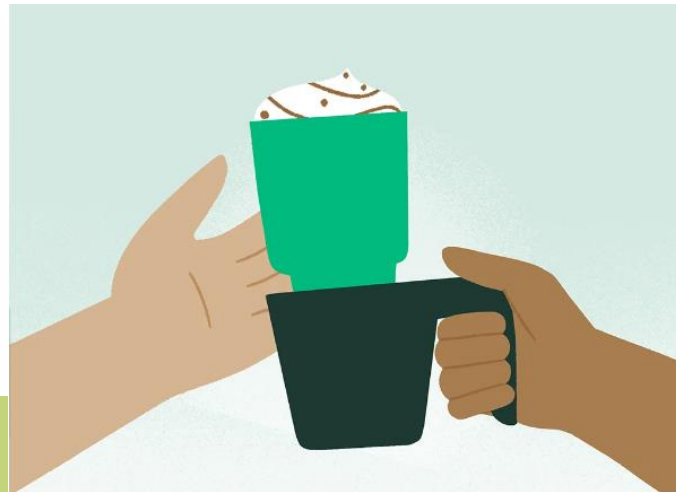
- *Drying and Storage*
 - Allow time and space for full air drying
 - Store inverted to avoid contamination
- *Inspection*
 - Visibly clean, not damaged
 - Process to remove container from circulation



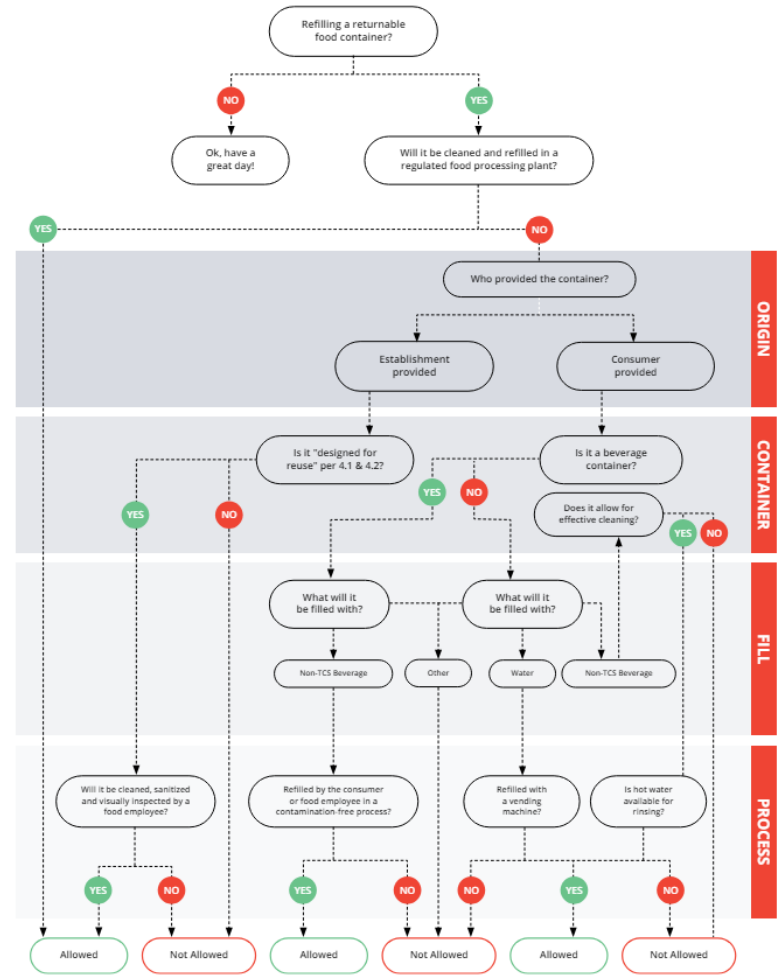
Source: Recirclable

Consumer-Provided Beverage Containers

- 105 CMR 590.003-304.17 Refilling Returnables
- Suitable Container/Inspection
- Size variation can affect pricing and recipe
- Does the cup cross the counter?



Source: Starbucks



Consumer-Provided Containers in Bulk Retail



Suitable container



Determine tare weight and inspect



Specify customer filling practices

Next Steps

- Today's slides will be shared by email.
- Opportunity to schedule 1-on-1 conversation with RecyclingWorks MA team.
- RecyclingWorks MA team will receive written feedback on draft.



Contact RecyclingWorks MA

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