Best Management Practices for Reusable Food and Beverage Containers in Food Establishments

MHOA Conference
November 14, 2024

CET
Resilient climate solutions

RECYCLINGWORKS
MASSACHUSETTS

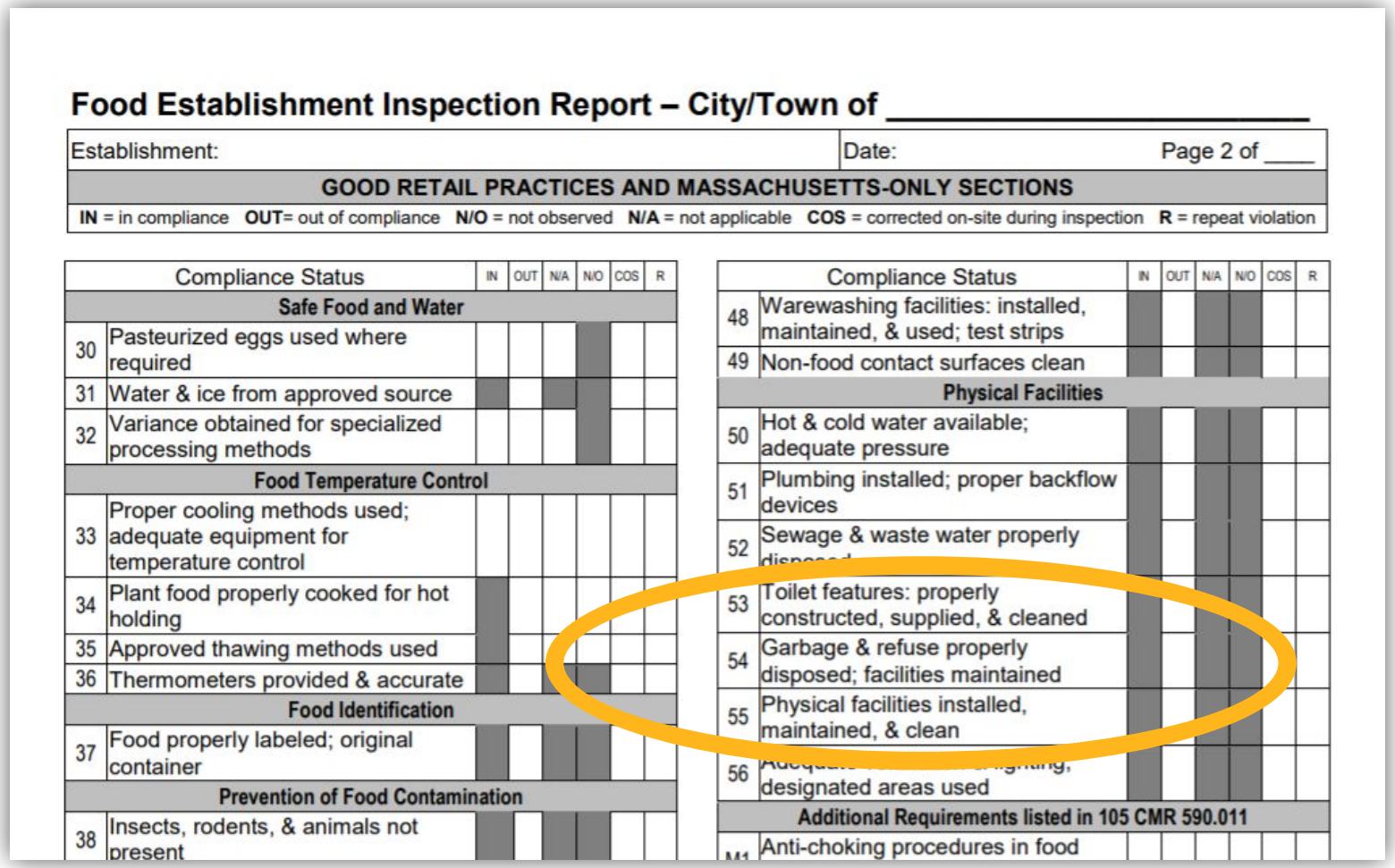
MassDEP

FREE ASSISTANCE FOR BUSINESSES & INSTITUTIONS

RecyclingWorks MA is funded by MassDEP, delivered under contract by CET

recyclingworksma.com

RecyclingWorks Resources to support



Food Establishment Inspection Report – City/Town of _____

Establishment:	Date:	Page 2 of ____

GOOD RETAIL PRACTICES AND MASSACHUSETTS-ONLY SECTIONS

IN = in compliance **OUT**= out of compliance **N/O** = not observed **N/A** = not applicable **COS** = corrected on-site during inspection **R** = repeat violation

	Compliance Status	IN	OUT	N/A	N/O	COS	R
	Safe Food and Water						
30	Pasteurized eggs used where required						
31	Water & ice from approved source						
32	Variance obtained for specialized processing methods						
	Food Temperature Control						
33	Proper cooling methods used; adequate equipment for temperature control						
34	Plant food properly cooked for hot holding						
35	Approved thawing methods used						
36	Thermometers provided & accurate						
	Food Identification						
37	Food properly labeled; original container						
	Prevention of Food Contamination						
38	Insects, rodents, & animals not present						

	Compliance Status	IN	OUT	N/A	N/O	COS	R
48	Warewashing facilities: installed, maintained, & used; test strips						
49	Non-food contact surfaces clean						
	Physical Facilities						
50	Hot & cold water available; adequate pressure						
51	Plumbing installed; proper backflow devices						
52	Sewage & waste water properly disposed						
53	Toilet features: properly constructed, supplied, & cleaned						
54	Garbage & refuse properly disposed; facilities maintained						
55	Physical facilities installed, maintained, & clean						
56	Adequate [illegible] lighting; designated areas used						
	Additional Requirements listed in 105 CMR 590.011						
M1	Anti-choking procedures in food						

Massachusetts Waste Disposal Bans

Commercial Food Waste

Applies to businesses & institutions generating one-half (0.5) tons or more food waste 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/

	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

What Is Technical Assistance?

Evaluate existing waste streams

Identify opportunities to prevent,

recover, and divert waste

Connect with service providers

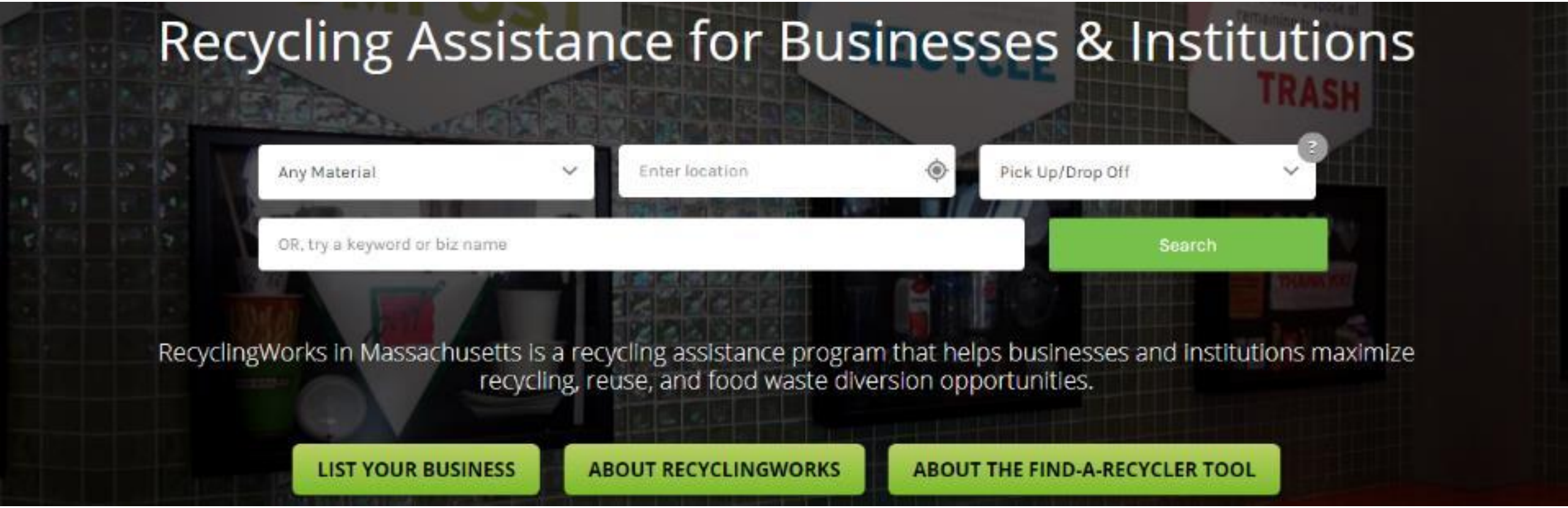
Create customized waste bin signage

Conduct cost analysis

Implementation assistance – education

and training

Find-A-Recycler Tool



Best Management Practice Guidance Developed by RecyclingWorks

Source Reduction Guidance

https://recyclingworksma.com/source-reduction-guidance/

Food Donation Guidance

https://recyclingworksma.com/donate/

Source Separation Guidance

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

Guidance for Businesses Contracting for Trash, Recycling, and Food Waste Services

https://recyclingworksma.com/hauler-contracting-bmp/

Source Reduction Guidance

- Cost savings
- Waste tracking
- Meal planning
- Food purchasing and Procurement
- Storage

recyclingworksma.com/source-reduction-guidance/

Food Donation Guidance

Why should my business donate?

What foods can be donated?

Building a donation program

Finding partner food rescue organizations

Food transportation

recyclingworksma.com/donate/

Food Donation

Is there extra food that can be donated today?

DONATE

- ☐ Whole fruits & vegetables
- ☐ Fresh dairy; milk and cheeses
- ☐ Grains; rice, bread, pasta
- ☐ Non-perishables in original packaging
- ☐ Perishable foods in original packaging
- ☐ Prepared Foods

Call _____ at _____ today with questions or to schedule pickup!

Store food in fridge located _____

Label and keep temperature log every _____ minutes.

NO

Moldy, rotten, spoiled food

Items past expiration date

Food not held at proper temperatures

RECYCLINGWORKS MASSACHUSETTS

If you can't donate it - compost it!
Compost bins are located _____

Food Scraps Source Separation Guidance

- Collect for composting, animal feed, or anaerobic digestion
- Container placement and color coding
- Clear signage
- Easily accessible and available bins
- Good housekeeping practices

recyclingworksma.com/source-separation-guidance

K-12 Schools

Share Tables

Reusable Trays

Dishwashers

Compost Site Technical Assistance

Assist commercial-scale sites with composting food scraps

Site layout and design

Operational best management practices

Pest and odor management

recyclingworksma.com/learn-more/compost-site-technical-assistance

Compost Site Operator Workshops

Opportunity for composters to tour a compost site and learn about best practices for composting food scraps

Reducing Waste from Restaurant Takeout and Delivery Meals

RECYCLINGWORKS MASSACHUSETTS

REDUCING WASTE FROM RESTAURANT TAKEOUT AND DELIVERY MEALS

Reducing your restaurant's single-use packaging can save money, reduce waste, and show commitment to sustainable practices. Prevent unnecessary waste and prioritize reusable materials to reap the most financial and environmental benefits.

Provide clear guidance to customers on what to do with the materials you give them. Remember that recyclables must be free of food and liquid residue.

TIPS FOR REDUCING UNNECESSARY WASTE

- Avoid single-use materials that cannot be recycled or composted.
- Require customers to request single-use utensils, napkins, straws, and condiment packets.
- Ask whether customers need a bag and avoid double-bagging.
- When possible, consolidate foods into the same container and do not individually wrap items.
- Take action to reduce wasted food! Click here to review our food waste diversion resources.

Tips for reducing unnecessary waste

Compostable and recyclable packaging options

Consider a reusable container program

https://recyclingworksma.com/wp-content/uploads/2020/12/Reducing-Waste-from-Restaurant-Takeout-and-Delivery-Meals.pdf

Consensus-Based Best Management Practices for Reusable Food and Beverage Containers in Food Establishments

Guidance Introduction

This guide provides best management practices for reusable takeout containers that align with the Massachusetts Food Code, aiming to help food service establishments in Massachusetts reduce waste from single-use disposables.

Reusable takeout container serviceware: durable containers, plates, bowls, and utensils used to hold food and/or beverages. Local health departments maintain the authority to interpret the Food Code as it applies to reusable serviceware.

Please note: Switching from single-use disposables to durable reusable containers **is not being mandated**. For establishments interested in making the switch, this guide offers best practices to consider

Who Should Use This Guide?

Resources in this guidance may also be helpful for:

- Food-serving establishments
- Health department officials
- Recycling coordinators
- Organizations and advocacy groups for reusables and/or waste prevention
- Industry associations for restaurants, colleges and universities, etc.
- Service providers for reusable serviceware and/or takeout container systems
- Vendors of reusable serviceware containers

Project Background

- RecyclingWorks held 3 stakeholder meetings (2023-2024) and 1-on-1 meetings to inform the outline
- Ensure food safety and consistency with MA Food Code
- Developed best management practice (BMP) recommendations for use of reusable food serviceware
  - Goal: Support increased use of reusable serviceware
  - Supports: Aligns with MassDEP's Solid Waste Master Plan & Reduce & Reuse Action Plan
- Previous BMP developed for composting food scraps and food donation

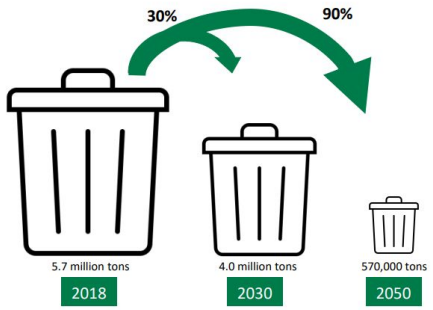


Figure 1. Massachusetts Waste Reduction Goals established in the 2030 Solid Waste Master Plan

Key Stakeholders Include:

State, Local and Regional Public Health Officials

Restaurant Owners and Other Food

Services Professionals

Reusable Container/Service Providers

Environmental Advocacy Organizations

Why should my business switch to reusable takeout containers?

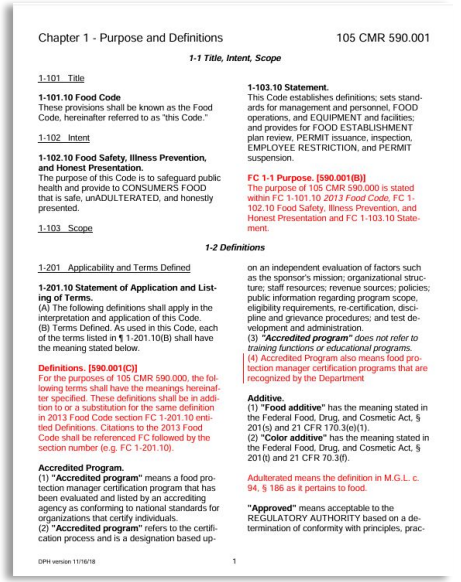
1. **Long-term Financial Savings:** After initial costs, switching to reusable containers can significantly reduce ongoing purchasing and disposal expenses.
2. **Encourage Customer Loyalty:** Providing reusable options may attract new and repeat consumers, as they may be more inclined to purchase again when returning their reusables.
3. **Marketing Opportunities:** Reuse supports community sustainability goals and appeals to eco-conscious customers.
4. **Environmental Benefits:** Switching to reusables reduces waste, conserves resources, saves water and mitigates greenhouse gas emissions created in with single-use items.

A Note on the Food Code; Health and Safety

The Massachusetts Food Code and local Health Departments are the best resources on ensuring reusable containers are being offered and utilized in accordance with public health standards. Since food establishments are **locally** permitted and inspected, please check with your local health department for any specific requirements.

For Food Code questions, contact Mark Carleo, Senior Food Safety Trainer, MassDPH, at **mark.l.carleo@mass.gov**.

In general, entities that are in the business of preparing and serving food to the public are *already* practicing the measures necessary to adopt the safe use of reusable food containers.



Chapter 1 - Purpose and Definitions 105 CMR 590.001

1-1 Title, Intent, Scope

1-101 Title

1-101.10 Food Code
These provisions shall be known as the Food Code, hereinafter referred to as "this Code."

1-102 Intent

1-102.10 Food Safety, Illness Prevention, and Honest Presentation.
The purpose of this Code is to safeguard public health and provide to CONSUMERS FOOD that is safe, unADULTERATED, and honestly presented.

1-103 Scope

1-103.10 Statement.
This Code establishes definitions; sets standards for management and personnel, FOOD operations, and EQUIPMENT and facilities; and provides for FOOD ESTABLISHMENT plan review, PERMIT issuance, inspection, EMPLOYEE RESTRICTION, and PERMIT suspension.

FC 1-1 Purpose. [590.001(B)]
The purpose of 105 CMR 590.000 is stated within FC 1-101.10 *2013 Food Code*, FC 1-102.10 Food Safety, Illness Prevention, and Honest Presentation and FC 1-103.10 Statement.

1-2 Definitions

1-201 Applicability and Terms Defined

1-201.10 Statement of Application and Listing of Terms.
(A) The following definitions shall apply in the interpretation and application of this Code.
(B) Terms Defined. As used in this Code, each of the terms listed in ¶ 1-201.10(B) shall have the meaning stated below.

Definitions. [590.001(C)]
For the purposes of 105 CMR 590.000, the following terms shall have the meanings hereinafter specified. These definitions shall be in addition to or a substitution for the same definition in 2013 Food Code section FC 1-201.10 entitled Definitions. Citations to the 2013 Food Code shall be referenced FC followed by the section number (e.g. FC 1-201.10).

Accredited Program.
(1) **"Accredited program"** means a food protection manager certification program that has been evaluated and listed by an accrediting agency as conforming to national standards for organizations that certify individuals.
(2) **"Accredited program"** refers to the certification process and is a designation based upon an independent evaluation of factors such as the sponsor's mission; organizational structure; staff resources; revenue sources; policies; public information regarding program scope, eligibility requirements, re-certification, discipline and grievance procedures; and test development and administration.
(3) ***"Accredited program"*** *does not refer to training functions or educational programs.*
(4) Accredited Program also means food protection manager certification programs that are recognized by the Department

Additive.
(1) **"Food additive"** has the meaning stated in the Federal Food, Drug, and Cosmetic Act, § 201(s) and 21 CFR 170.3(e)(1).
(2) **"Color additive"** has the meaning stated in the Federal Food, Drug, and Cosmetic Act, § 201(t) and 21 CFR 70.3(f).

Adulterated means the definition in M.G.L. c. 94, § 186 as it pertains to food.

"Approved" means acceptable to the REGULATORY AUTHORITY based on a determination of conformity with principles, prac-

DPH version 11/16/18 1

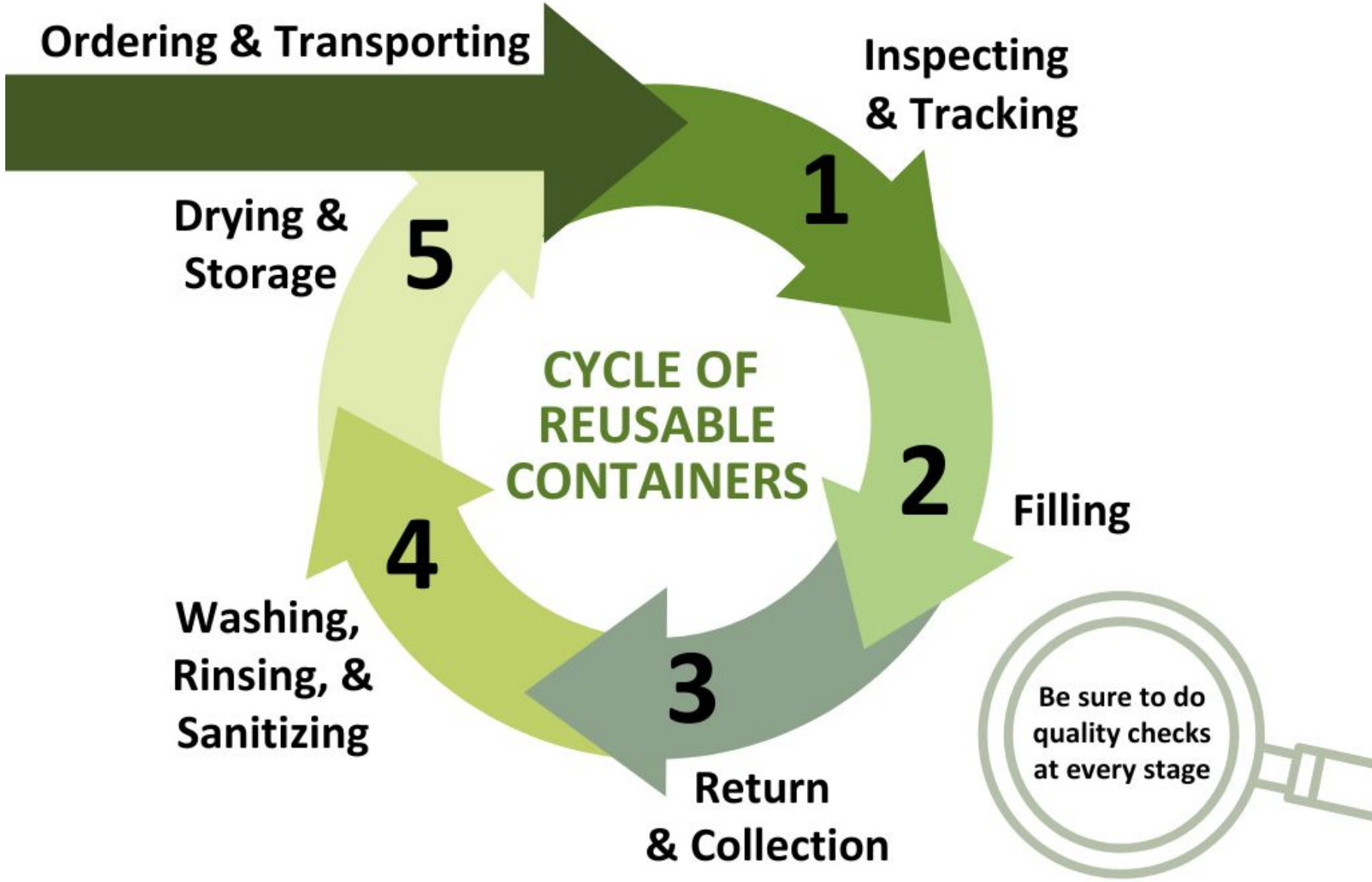
Massachusetts Food Code - 105 CMR 590

Three distinct scenarios emerged:

- Establishment provided containers for takeout and leftovers
- Beverage containers - consumer provided containers for take out
- Retail and Bulk use - consumer provided containers

Establishment-Provided Reusable Containers

Cycle of Establishment Provided Reusable Containers



Food & Beverage Containers in Food Service: Container Selection

Defined as: Any durable bowl, plate, box, container or cup provided by the establishment for consumer use (on and off-site).

Health & Safety: Containers must be designed and constructed for reuse and in accordance with the requirements specified in the Massachusetts Food Code (if a product is NSF-certified, it is compliant with the Massachusetts Food Code). For more in-depth evaluation, The Center for Environmental Health (CEH) and Clean Production Action (CPA) have created GreenScreen Certified® for Reusable Food Packaging, Service Ware, & Cookware

The reusable container must be:

- Durable, corrosion-resistant, and non-absorbent;
- Sufficient in weight and thickness to withstand repeated washing and sanitizing;
- Finished to have a smooth, easily cleanable surface; and
- Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.

Consider intricacy of container structure and how that will affect the washing and sanitation process.

Source: Massachusetts Food Code, Parts 4-1 (page 51) and 4-2 (page 52).

Food & Beverage Containers in Food Service: Receiving Shipments

Receiving and storing reusables should follow the same guidelines as for storing equipment and utensils. The container holding the reusables needs to be clean and stored in a manner to prevent contamination.

Reusable serviceware must be stored 6" off the ground, covered or inverted, and not exposed to splash, dust, or pests.

When receiving a shipment of new reusables, follow similar protocol to receiving other materials, with staff to appropriately unload, inspect, and move the reusables to the storage area.

Source: Massachusetts Food Code, Part 4-903.11 (page 67)

Food & Beverage Containers in Food Service: Inspecting, Tracking & Decommissioning/Retiring

All reusable containers should be visually inspected by an employee to verify that the container meets the requirements specified in the Massachusetts Food Code.

After they are washed, rinsed, and sanitized, check for food residue, remaining debris, or physical damage, as one would any washed durable good, at every phase of the reusable container cycle, and containers identified for removal should be removed immediately.

Visual signs to take a container out of circulation may include:

Cracks
Heavy scratches
QR code damaged, if applicable
Dented beyond use
Lid (if applicable) doesn't fit securely

Source: Massachusetts Food Code, Part 3-304.17 (page 35)

Food & Beverage Containers in Food Service: Filling

Reusable takeout containers should be filled in the same prep area and with the same methods as in-house food: **avoid cross-contamination and consider allergens when filling and handling** the containers.

If applicable, ensure the lid is closed securely after filling.

Food & Beverage Containers in Food Service: Container Return and Collection

Restaurants should determine a clear and convenient front-of-house collection method for consumers to efficiently drop off used containers. Maintain a collection schedule to prevent unsanitary conditions; this may occur at the same time as other bus buckets are emptied. Clearly communicate (or display) standards for the condition in which consumers should return the container. Clean and sanitize non-food contact collection bin (e.g. bus bucket) as necessary.

Institutions should establish distinct and easily identifiable collection receptacles and signage for returning reusable containers. Return receptacles may contain washable collection tote(s) inside to be removed and emptied as necessary. For convenience, consider placing the container return near the tray return.

Source: Massachusetts Food Code, Part 4-602.13 (page 64)

Food & Beverage Containers in Food Service: Washing, Rinsing, & Sanitizing

Scrape and rinse any food residue from containers returned by consumers before washing and sanitizing. If needed, identify an off-site location for warewashing (see also: Island Eats: Standard Operating Procedure for Washing & Transportation)

FDA Washing Guidelines for mechanical washing:

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

FDA Washing Guidelines for manual washing:

- Use a triple basin. One sink each for:
  - Washing (detergent required) at 110°F minimum
  - Rinsing
  - Sanitizing
    - Fully submerge ware in chemical sanitizer sink manufacturer-specified amount of time. Time may also be dependent on the type of chemical agent used.

Source: Massachusetts Food Code, Part 4-6 (page 63) and Part 4-7 (page 66)

Food & Beverage Containers in Food Service: Air Drying & Storage

After washing and sanitizing, **air dry all reusable containers** and ensure complete drainage and drying

Considerations for ensuring proper air drying

Consider the intricacy of container structure (e.g. gaskets, grooves etc.) that may complicate drying. Adjust drying methods accordingly to compensate for intricate structures (e.g., allow more dry time; remove parts to dry separately). S**erviceware cannot be towel dried** under the Food Code. Use special trays with partitions and racks to enhance drying efficiency.

Considerations for storage

Standards for storing reusables are the as in-house dining plates and other serviceware. Reusables may be kept in areas previously used to store single-use containers. Store dry reusables inverted or covered in National Sanitation Foundation (NSF)-certified racks or bins to prevent contamination.

Source: Massachusetts Food Code, Part 4-903.11, paragraph B (page 67) and Parts 6-501.111 (page 82) and 7-201.11 (page 85)

Examples of Businesses with Successful Programs

Kat McCarthy October 22, 2020

During the pandemic takeout meals have become the norm, enabling restaurants across Massachusetts to continue serving customers when in-person dining is limited. For consumers, this convenience comes with a trade-off: an abundance of packaging and single-use items that often cannot be recycled. For the food service industry, this means spending money to purchase items that often cannot be recycled, and leaving customers with extra packaging waste.

Grainmaker, a fast-casual restaurant with locations in Boston and Somerville, has embraced its values of strengthening the community and being a positive influence by creating a program to reduce packaging waste from to-go orders. After less than a year of implementation, this program is already reducing waste and saving the business and customers money. RecyclingWorks in Massachusetts (RecyclingWorks) recently spoke with Grainmaker owner Chris Freeman to learn more about their Zero Waste Project.

[Grainmaker Blog]

Olivia September 29, 2023

Johnny's Luncheonette, an iconic Newton diner with robust recycling and food waste diversion programs, continues to push the envelope in sustainability.

The diner now offers a reusable takeout container program! Customers who choose to join the program can order menu items for takeout in containers that won't end up in any waste, recycling, or composting bins, but rather be returned, thoroughly sanitized, and re-used in a continuous cycle.

Through a collaboration with **Recirclable**, Johnny's Luncheonette now provides a selection of its breakfast and lunch menu items in easily recognizable green-hued reusable to-go containers. The containers are manufactured by Preserve and Ozzi, and are composed of readily available and recyclable BPA-free polypropylene (#5 Plastic). These containers can be used up to 1,000 times, and at their end-of-life, Preserve and Ozzi take the containers back to have them recycled. As evidenced, this initiative is helping to reduce both the disposal and purchasing of single-use takeout items.

[Johnny's Luncheonette Blog]

Olivia November 28, 2022

The dining halls and eateries at colleges and universities are ripe with waste prevention opportunity. Transitioning away from single-use takeout containers is one way institutions can significantly reduce their waste and carbon footprints.

This year, **Mount Holyoke College swapped out its single-use food containers and cups for returnables**. The college accomplished this by partnering with **USEFULL**, a company that customizes durable stainless steel foodservice containers that are made to be used, returned, washed, and reused.

In an average year, Mount Holyoke was using around 250,800 compostable containers. Their switch to returnable packaging is projected to prevent 5,488 pounds of single-use material from entering the waste stream each year.

Here is the impact of Mount Holyoke's transition to USEFULL containers since they implemented the program in February 2022:

[Mount Holyoke Blog]

Consumer-Provided Reusable Containers

Beverage Containers in Food Service: Container Considerations

Consumer provided reusable beverage containers are referenced in the Massachusetts Food Code. The Conference for Food Protection developed the "Guidance Document for the Safe Use of Reusables" to ensure safe consumption and suitability for reusable beverage containers.

Consumers can use insulated containers to store hot beverages. Containers intended for cold beverages should not be used for hot beverages.

Source: Massachusetts Food Code, Part 3-304.17, paragraphs (C), (D), and (E) (page 35)

Beverage Containers in Food Service: Filling & Rinsing

The beverage container may be filled by an employee or the consumer as long as it follows a contamination-free filling process as specified in the Massachusetts Food Code.

Ensure consumer-provided beverage container does not come into contact with back-of-house prep space.

It is not necessary to rinse a consumer's beverage container if it passes visual inspection by an establishment employee. Establishments may choose to rinse beverage containers that do not pass visual inspection if containers can be rinsed with "fresh, hot water that is under pressure and not recirculated are provided as part of the dispensing system"

Source: Massachusetts Food Code, Part 3-304.17 (page 35) and Part 4-204.13, paragraphs A, B, and D (page 54).

Consumer-Provided Food Containers

Consumers may transfer their freshly prepared meals or in-house dining leftovers from the establishment's dishware into personal containers at their dining table, **as long as the consumer-owned container remains within the consumer area and has not been taken into the back of the house** (behind the counter, into the kitchen, etc.).

Reusable Containers for Bulk Retail

Reusable bulk food containers

Containers should be:

- Suitable for the intended use
- Durable, corrosion-resistant, and nonabsorbent;
- Sufficient in weight and thickness to withstand warewashing (washing and sanitizing);
- Finished to have a smooth, easily cleanable surface; and
- Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.

Additional Considerations:

If a product is National Sanitation Foundation Institute (NSF)-certified, it is compliant with the Massachusetts Food Code. Business should defer to their local health department to inquire about any specific requirements for consumer-provided containers.

Source: Massachusetts Food Code, Part 4-101.11 (page 51)

Inspecting

All reusable bulk food containers must be visually inspected by a food establishment employee to verify that the container meets requirements specified in the Massachusetts Food Code, or that the container is NSF-certified.

Employees must visually inspect consumers' reusable containers before they are filled. If customers pay for bulk by weight, employees could visually inspect containers when taring (weighing) them before customers fill them.

Containers should be free of:

- Visible soil or food debris
- Pitting, cracking, chipping, crazing (visual cracks on the surface), scratching, scoring and distortion

Source: Massachusetts Food Code, Part 3-304.17 (page 35)

Filling

When filling reusable bulk food containers, the food establishment's dispensers, utensils, and other equipment **should not come into contact with the container**.

Here are examples of contamination-free filling methods:

- Gravity-fed dispensers (self-service, bulk gravity flow)
- Self-service, non-gravity fed (scoop bins, spice containers, bulk foods with utensils)
- Intermediary liners (full-service, employee refilling, using liners such as wax paper)

Please refer to the Conference for Food Protection
Guidance Document for Safe Use of Reusable Containers
for detailed descriptions of each of the above filling methods.

Washing, Rinsing, Sanitizing, Drying, & Storage

Retail and bulk food establishments should ensure that scoops, tongs, ladles, or other utensils used to fill containers are sanitized at least every 24 hours.

For guidance on washing, rinsing, sanitizing, drying, and storing Establishment-Provided bulk food reusable containers, see the applicable sections in the Establishment-Provided Food Containers in Foodservice section.

Source: Massachusetts Food Code, Part 4-602.11, paragraph E (page 63)

Guidance Conclusion

This collection of best management practices focuses on the use of reusable take out containers in foodservice and retail/bulk food settings in alignment with the Massachusetts Food Code.

For any questions about switching to reusable containers or would like no-cost assistance with implementing a reusables program, contact our hotline:

Phone: 888-254-5525
Email: info@RecyclingWorksMA.com

Additional Resources

- MassDEP Reduce and Reuse Working Group
- MassDEP Reduce & Reuse Action Plan
- Massachusetts Merged Food Code
- Guidance Document for Safe Use of Reusable Containers, Conference for Food Protection
- NSF Food Storage Containers webpage
- Third Party Container provider examples:
  - DeliverZero, Muuse, Ozzi, Recirclable, ReThink Disposable, ReUser, Preserve, and USEFULL
- Reusable Container Quickstart Guide, Circular Philadelphia
- Toolkit Refilling Consumer owned Containers _1_.docx
- The New Reuse Economy: The Future of Food Service is Reusable (an UPSTREAM resource)

recyclingworksma.com/reusable-containers-guidance/

Heather Billings

508-479-3713

heather.billings@cetonline.org

info@recyclingworksma.com