

Reading Climate Advisory Committee



Polystyrene Bylaw



November 14, 2022

What is Polystyrene?

Polystyrene is a particular type of plastic. It may be labeled with the recycling number “6” or “PS 6.” It comes in two forms which, in the bylaw, are called foam polystyrene and rigid polystyrene.



Disposable food service containers are single-use disposable products used for serving, consuming or transporting food or beverages:

- **Foam Polystyrene is blown polystyrene and expanded and extruded foams** (sometimes called “Styrofoam”). Foam Polystyrene is generally used to make opaque cups, bowls, plates, trays, clamshell containers, meat trays, and egg cartons.
- **Rigid Polystyrene is clear or solid polystyrene.** Rigid Polystyrene is generally used to make clear clamshell containers, and clear or colored cups, plates, straws, lids, and utensils. It is relatively strong and stiff but brittle.



What is the Problem?

Polystyrene is based on **styrene, a neurotoxin and probable carcinogen**. Polystyrene is the only plastic used in food packaging that is based on a carcinogen. Polystyrene resin usually contains a small amount of residual styrene that can leach out of the plastic. Styrene leaching increases with temperature and with certain foods (alcohol, oils or fat).

Polystyrene items **harm wildlife**. The foam form, in particular, is often mistaken as food by both domesticated and wild animals.

Polystyrene is **not biodegradable**. It fragments through mechanical action and photodegradation in the presence of light; the process takes an estimated 200+ years to complete.

Polystyrene is **almost never recycled** due to its low value. The bulky foam form is not accepted in curbside recycling programs. The rigid form even when collected curbside is never recycled.

No Longer Acceptable

Polystyrene Products:



What is the alternative?

Paper/cardboard

Foil

Plant-based materials

Compostable containers

Other types of plastics
(#1,#2,#3,#4,#5, and #7)



Commonly recycled



Existing Bylaws & Laws

MassGreen.org lists Polystyrene Regulations in

47

Cities and Towns in Massachusetts

Abington, Amherst, Andover, Arlington, Athol, Brookline, Buckland, Cambridge, Chelmsford, Concord, Dennis, Eastham, Essex, Georgetown, Gloucester, Grafton, Great Barrington, Greenfield, Hamilton, Hanson, Ipswich, Lee, Lenox, Lexington, Manchester-by-the-Sea, Marblehead, Melrose, Nantucket, Natick, Newton, Northborough, Orleans, Pittsfield, Provincetown, Rockport, Saugus, Shrewsbury, Somerville, South Hadley, Stockbridge, Upton, Wayland, Wellfleet, Westfield, Westford, Williamstown, Winthrop

&

Foam polystyrene is banned in Maryland (2020), Maine (2021), Vermont (2021), New York (2022), New Jersey (2022), Colorado (2024), and Virginia (2025).

Regulation

Regulation

- **Food establishments** within the Town shall be prohibited from using or distributing **disposable food service containers** made from **foam polystyrene or rigid polystyrene**, or polystyrene cutlery or other polystyrene single-use disposable products.

This bylaw does not limit

- Service items made of other materials including other plastics
- Prepackaged food or beverage products bought from another supplier
- Polystyrene food service items sold to individuals for private use
- Items unrelated to food service like foam packaging peanuts or freezer chests

The purpose of this bylaw is to limit the distribution of polystyrene food service containers and utensils and to encourage establishments to

- switch to similar items made of healthier and more environmentally friendly materials, or to
- switch to reusable food service items, or to
- adopt other approaches that do not require such containers or utensils.

Who is affected?

Food establishments shall mean operations that store, prepare, package, serve, vend or otherwise provide food for human consumption as further defined in 105 CMR 590.002, including, but not limited to,

- restaurants, mobile food vendors, caterers,
- public and private schools,
- farmers markets,
- civic or religious centers or facilities,
- any building owned by the Town of Reading, and
- any establishment requiring a permit to operate in accordance with the State Food Code.*

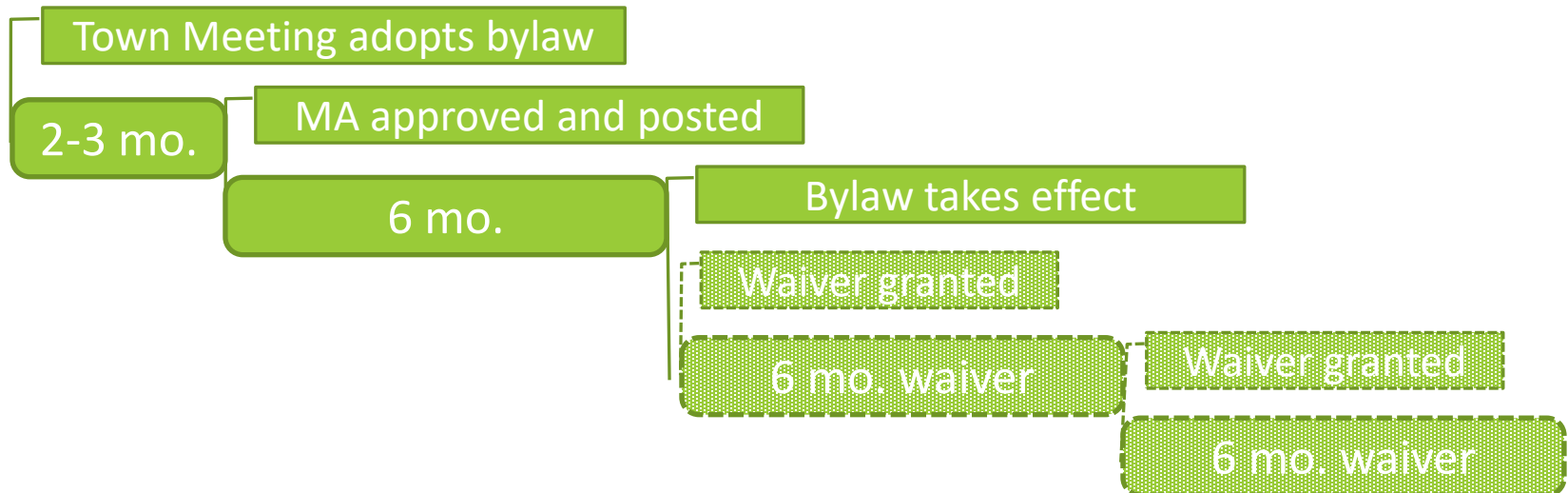
* MA Department of Public Health regulation 105 CMR 590 STATE SANITARY CODE CHAPTER X - MINIMUM SANITATION STANDARDS FOR FOOD ESTABLISHMENTS

Implementation

This bylaw takes effect six months after it is posted by the Town Clerk.

Reading's Public Health Director is the enforcement officer.

- The Director may grant a food establishment up to two (2) six-month waivers.
- The Director may promulgate rules and regulations to implement this bylaw.
- Penalties under this bylaw are mild compared to typical bylaws.
 - First Offense: Warning; Second Offense: \$50; Additional Offenses: \$200



Alternatives

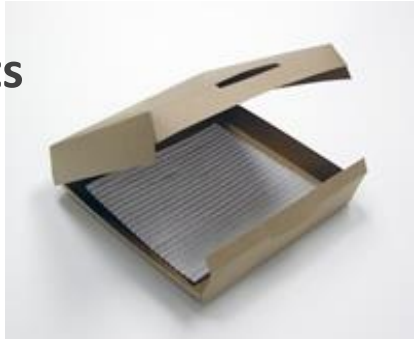
No Longer Acceptable

Polystyrene Products:



Alternatives

Paper Products



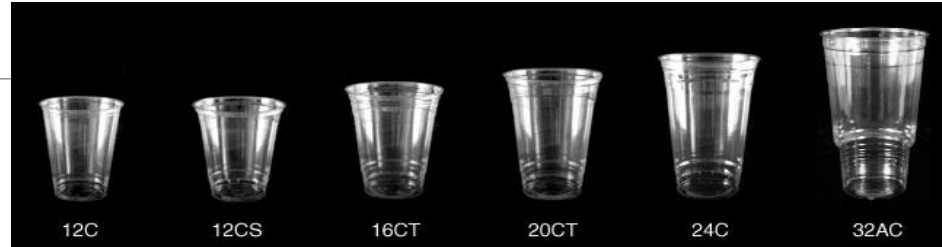
Foil Products



Alternative Plastics



PET / PETE
Polyethylene:



PP
Polypropylene:



Cups



Rigid Polystyrene
8 oz.
\$47.49 for 500
9.5¢ each



Polyethylene
9 oz.
\$96.99 for 1000
9.7¢ each



Polypropylene
9 oz.
\$66.99 for 2500
2.8¢ each

Takeout



Foam Polystyrene
9" x 9" x 3"
\$35.49 for 200
18¢ each



Compostable Sugarcane
9" x 9" x 3"
\$43.99 for 200
22¢ each



Aluminum Foil
8 3/4" x 6 1/8" x 2 1/8"
\$40.99 for 250
16¢ each

Takeout



Rigid Polystyrene
9" x 9 1/2" x 3"
\$89.99 for 200
45¢ each



Mineral Filled Polypropylene
9" x 8 13/16" x 3"
\$69.99 for 150
47¢ each



Cardboard
8" x 8" x 3"
\$50.99 for 110
46¢ each

Summary and Comparison

Table 1: Cost comparison between polystyrene products and proposed alternatives

Item	Cost [\$/unit]	Cost difference [¢]
8 oz. White Foam Coffee Cup	0.049	
8 oz. Paper Coffee Cup	0.036	
Sleeve for 8 oz cup	0.026	+ ¢ 1.30
20 oz. White Foam Cup	0.12	
20 oz. Paper Coffee Cup	0.08	
20 oz. Paper Coffee Sleeve	0.035	- ¢ 0.50
Polystyrene plate	0.065	
Sugarcane plate	0.086	+ ¢ 2.10
Big Black Polystyrene Takeout Container	0.23	
Big Sugarcane Takeout Container	0.22	- ¢ 1.00
Small Polystyrene Takeout Container	0.082	
Small Sugarcane Takeout Container	0.11	+ ¢ 2.80
Polystyrene Fork	0.037	
Polypropylene Fork	0.038	+ ¢ 0.10
Polystyrene Cutlery Pack	0.06	
Polypropylene Cutlery Pack	0.058	- ¢ 0.20

Source: www.webstaurantstore.com

Questions?

Backup

Reviews / Outreach

Aug. 4	Board of Health
Aug. 30	Select Board
Sep. 6	Town Counsel
Sep. 7	Bylaw Committee
Sep. 8	RPS Food Service
Sep. 10 ...	Businesses
Oct. 3	Chamber of Commerce
Oct.12	Public Forum (Zoom)
Oct.13	Public Forum (Library)
Oct.27	Public Forum (Tin Bucket)
Nov. 14	Town Meeting

Cups



Styrofoam (Polystyrene)
8 oz.
\$49.49 for 1000
4.9¢ each

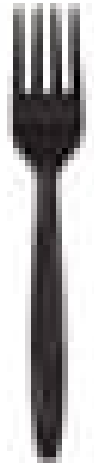


Poly-coated Paper
8 oz.
\$35.99 for 1000
3.6¢ each

Forks



Rigid Polystyrene
\$17.49 for 1000
1.7¢ each



Polypropylene
\$28.99 for 840
3.5¢ each



Compostable Plastic
(e.g., cornstarch)
\$76.99 for 1000
7.7¢ each

Lids



Polystyrene
3 5/8"
\$134.99 for 2000
6.7¢ each



Polyethylene
4" / 9 oz.
\$29.99 for 1000
3.0¢ each



Compostable Plastic
4" / 9 oz.
\$38.99 for 1000
3.9¢ each