

Reading Climate Advisory Committee



Polystyrene Bylaw

August 14, 2022

CAC proposed bylaw to prohibit polystyrene food service items

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. Polystyrene comes in two forms
- The rigid form is used for clear food containers, plates, bowls, beverage cups and lids, utensils, and straws.
- The foam form (including Styrofoam) is used for plates, insulated beverage cups and bowls, clamshell food containers, and trays.

This proposed bylaw does not limit

- Service items made of other materials including other plastics
- Polystyrene items offered for sale (usually in bulk)
- Prepackaged meat and produce trays, egg cartons, and other food or beverage products bought from or packaged by any supplier located out of the Town
- Foam polystyrene packaging peanuts
- Foam polystyrene freezer chests

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 percentage of residual styrene. Styrene leaching increases with temperature and with certain foods (alcohol, oils or fat).

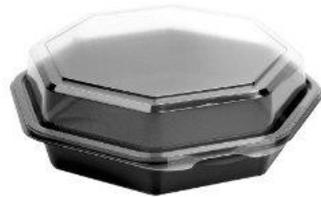
Polystyrene items **harm wildlife**. The foam form in particular is often mistaken as food by both domesticated and wild animals.

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

MassGreen.org lists Polystyrene Regulations in

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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 (polystyrene), Provincetown (plastic straws), Rockport, Saugus, Shrewsbury, Somerville, South Hadley, Stockbridge, Upton, Wayland, Wellfleet, Westfield, Westford, Williamstown, Winthrop

Def: Polystyrene

“Polystyrene” shall mean and includes:

- Blown polystyrene and expanded and extruded foams (sometimes called “Styrofoam,” a Dow Chemical Co. trademarked form of insulation) also referred to as expanded polystyrene (EPS), which is herein referenced in this bylaw as “Foam Polystyrene.” Foam Polystyrene is generally used to make opaque cups, bowls, plates, trays, clamshell containers, meat trays, and egg cartons; and
- Clear or solid polystyrene which is also known as “oriented,” which is herein referenced in this bylaw as “Rigid Polystyrene.” Rigid Polystyrene is generally used to make clear clamshell containers, and clear or colored cups, plates, straws, lids, and utensils.
- Polystyrene may be labeled with the recycling number “6” or “PS 6”.

Def: Food Establishment

“Food Establishments” shall mean any operations that store, prepare, package, serve, vend or otherwise provide food for human consumption, including, but not limited to, restaurants, mobile food vendors, caterers, residential kitchen operators, schools, farmers markets, public venues, and any establishment requiring a permit to operate in accordance with the State Food Code.

“Public Venues” shall mean operations including, but not limited to, meeting halls, churches, Town offices, the Senior Center, Recreation Department facilities, libraries, and public schools operating in Town.

Def: Food Service Container

“Disposable Food Service Containers” shall mean single-use disposable products used for serving, consuming or transporting food or beverages, including, but not limited to take-out foods or leftovers from partially consumed meals prepared by a restaurant or other food establishment. This includes, but is not limited to, plates, cups, bowls, trays, hinged or lidded containers, straws, cup lids, and cutlery. It shall also include single-use disposable packaging for uncooked foods prepared on the premises, as well as disposable catering trays.

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.

Enforcement

8.x1.2.5 “Director” shall mean the Health Director or the Health Director’s designee.

8.x1.4.1 The Director shall have the authority to administer and enforce this bylaw. In addition to any other means of enforcement, the provision of this bylaw and any regulations adopted pursuant thereto may be enforced by non-criminal disposition in accordance with the provisions of Section 1.8 of the Town’s General Bylaw and MGL Chapter 40 Section 21D.

8.x1.4.2 Food Establishments shall have fifteen (15) calendar days, after the date that a notice of violation is issued, to pay the penalty or request a hearing in writing to the Director. No more than one (1) penalty shall be imposed upon a Food Establishment within a fifteen (15) calendar-day period.

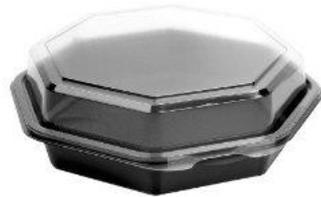
8.x1.4.3 In the event that compliance with this bylaw is not feasible for a Food Establishment because of either unavailability of suitable alternative containers or economic hardship, the Director may grant a waiver of not more than six (6) months upon application of the owner or owner’s representative. The Director may provide one (1) additional six-month waiver upon showing of continued infeasibility or hardship, as set forth above.

8.x1.4.4 The Director may promulgate rules and regulations to implement this bylaw.

Penalties: To penalty table in Bylaws Section 1.8 add,
First Offense: Warning; Second Offense: \$50; Additional Offenses: \$200

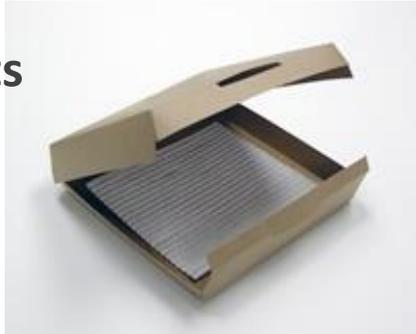
No Longer Acceptable

Polystyrene Products:



Alternatives

Paper Products



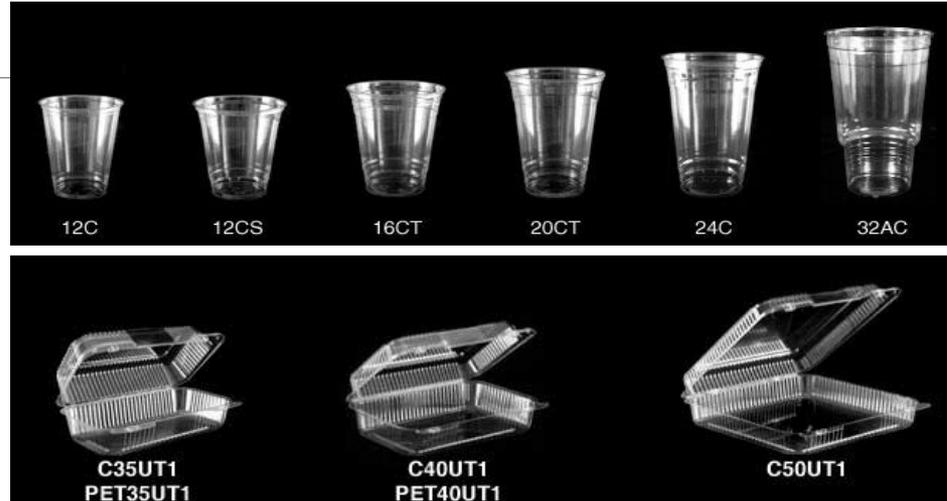
Foil Products



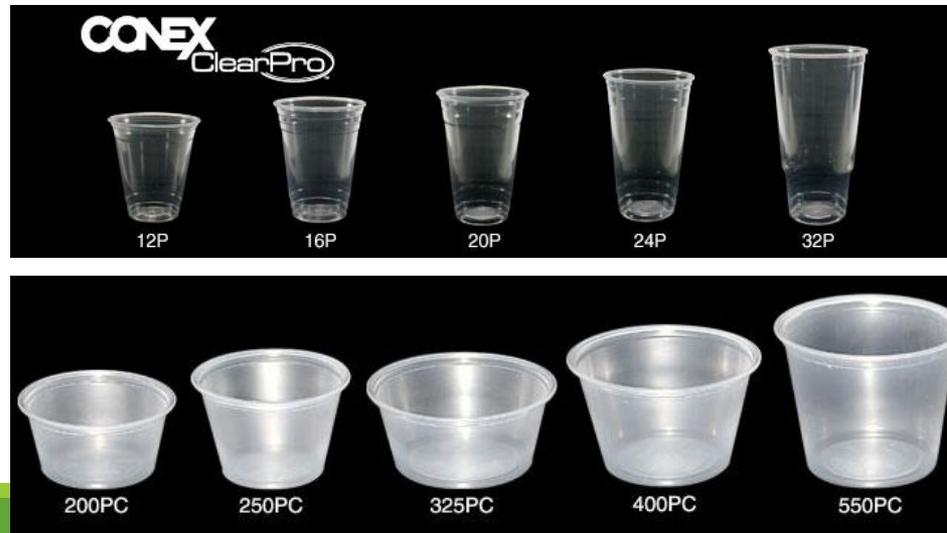
Alternative Plastics



PET / PETE
Polyethylene:



PP
Polypropylene:



Backup

Alternatives

Possible Alternatives to Polystyrene

- ❖ Paper
- ❖ Aluminum
- ❖ Compostable

- ❖ Polyethylene Plastics 
- ❖ Polypropylene Plastics 
- ❖ Miscellaneous Plastics 



Companies/Products:

- ❖ Amazon.com
- ❖ Be Green Packaging
- ❖ BioMass Packaging
- ❖ Cryovac
- ❖ Dart
- ❖ EcoProducts
- ❖ Hubert
- ❖ Fabri-Kal
- ❖ GreenWave
- ❖ Mr. Takeout Bags
- ❖ Packaging Specialties
- ❖ Pactiv
- ❖ TriMark United East
- ❖ US Eco Products
- ❖ Vegware
- ❖ WB Mason

Definitions

Styrene = An organic compound derived from benzene. It is associated with a number of health risks, including cancer.

Polystyrene = Plastic made of styrene. This can take many forms, from coffee lids and sushi boxes to EPS cups.

EPS = Expanded Polystyrene, a bulky, lightweight plastic in the form of a smooth, rigid foam. Widely used for everything from coffee cups to insulation.

XPS = Extruded Polystyrene is the bumpier rougher form of EPS, the kind that breaks off in chunks. Packing materials, e.g.

Styrofoam = A brand name for the XPS manufactured by Dow Chemicals. Informally, “Styrofoam” is widely used to refer to all EPS and XPS.

Polystyrene vs. Polypropylene

Polypropylene cutlery is perfect for use with foods that are not difficult to cut such as softer meals like pasta and are more bendable compared to polystyrene cutlery. Polypropylene plastic also has a shinier surface compared to polystyrene. Polystyrene cutlery features a denser design and is not as bendable as polypropylene cutlery, so they are more prone to breaking under heavy pressure. Their durable design makes them perfect for cutting through tough food items such as steak. This plastic is better suited for creating sharper edges on cutlery so they can cut through tough food items with ease.

Draft Bylaw Revisions

| Revision | Date | Changes |
|----------|-----------|--|
| Rev- | 5/22/2022 | Original. |
| RevA | 8/3/2022 | In section 8.x1.2.5 changed “DPW” to “Health” in two places. In section 8.x1.4.2 changed “Retail” to “Food” in two places. Correction. |
| RevB | 8/13/2022 | In section 8.x1.2.4 replace “not limit to” with “not limited to.” Correction. In section 8.x1.3.1 replace “using, distributing or selling” with “using or distributing.” In section 8.x1.3.2 delete the bullet items for packing peanuts and for freezer chests. |
| RevC | 8/14/2022 | In section 8.x1.2.4 replace “means” with “meals.” Correction. |