



# TOWN OF WINTHROP BOARD OF HEALTH

## Regulation of the Winthrop Board of Health Restricting the use of Expanded Polystyrene Disposable Food Containers in Food Serving Establishments

### A. Statement of Purpose

Whereas styrene is a synthetic compound often used to make rubber, plastic, insulation, fiberglass, pipes, automobile parts, carpet backing and disposable food containers.<sup>1</sup>

Whereas published in the National Toxicology Program's 12th Report on Carcinogens (2011), styrene, a key ingredient in polystyrene and expanded polystyrene is reasonably anticipated to be a human carcinogen.<sup>2</sup>

Whereas styrene exposure can occur through smoking, inhalation of indoor air, and ingestion of food.<sup>2</sup>

Whereas styrene seeps out of polystyrene containers and into warm food and drink, causing a recommendation against microwaving polystyrene food containers.<sup>3</sup>

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<sup>1</sup> Agency for Toxic Substances & Disease Registry, (2011), *Toxic Substances Portal* (Styrene). Retrieved from: <http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=74>.

<sup>2</sup> National Toxicology Program, (NTP) (2014), *13th Report on Carcinogens (RoC)* (Substance Profile (Styrene). Retrieved from: <http://ntp.niehs.nih.gov/ntp/roc/content/profiles/styrene.pdf>.

<sup>3</sup> The Way To Go, (2008), *Polystyrene Fact Sheets*. Retrieved from: <http://isites.harvard.edu/fs/docs/icb.topic967858.files/PolystyreneFactSheets.pdf>.

Whereas in a study concerning the migration of styrene in polystyrene cups to hot drinks, it was determined that the concentration of styrene monomer found in the drinks was above the Environmental Protection Agency recommended levels, including the Maximum Contaminant Level Goal (MCLG) standard.<sup>4</sup>

Whereas the amount of styrene monomer migration from polystyrene into hot drinks was dependent on the temperature and fat content of the drinks.<sup>4</sup>

Whereas exposure to styrene vapor can cause irritations of the eyes, nose, throat, and skin, as well as toxic effects on the liver, and can act as a depressant on the central nervous system that also causes neurological impairment.<sup>4</sup>

Whereas potential effects of styrene exposure during its production can cause eye and mucosal irritations and gastrointestinal issues. Possible effects on the central nervous system include headache, weakness, fatigue, depression, general dysfunction, hearing loss and peripheral neuropathy.<sup>5</sup>

Whereas workers with high exposure to styrene showed increased cancer of the lymphohematopoietic system and possibly related mortality, as well as increased levels of DNA adducts and genetic damage to lymphocytes.<sup>2</sup>

Whereas occupational studies concerning styrene have shown risks for workers for lymphohematopoietic cancers, such as leukemia and lymphoma, and genetic damage in the white blood cells, or lymphocytes, as well as increased risks for pancreatic and esophageal cancers.<sup>2</sup>

Whereas styrene has caused lung tumors in mice.<sup>2</sup>

Whereas benzene, a component of polystyrene is a known carcinogen and enters the body through the respiratory system and skin contact.<sup>3</sup>

Whereas polystyrene is a harm to the environment. It makes up a considerable amount of debris in cities, and is harmful to the marine wildlife that it often arrives in.<sup>3</sup>

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<sup>4</sup> Khaksar, M.R. & Ghazi-Khansari, M. (2009) *Determination of migration monomer styrene from GPPS (general purpose polystyrene) and HIPS (high impact polystyrene) cups to hot drinks*. *Toxicology Mechanisms and Methods*, 19(3), 257-261. DOI: 10.1080/15376510802510299 or Retrieved from: <http://informahealthcare.com/doi/abs/10.1080/15376510802510299>.

<sup>5</sup> Environmental Protection Agency, (EPA) (2000), *Styrene*. Retrieved from: <http://www.epa.gov/ttn/atw/hlthef/styrene.html>.

Whereas the environmental impacts of polystyrene rank second behind aluminum for total environmental impacts especially in energy consumption and greenhouse gas effects.<sup>3</sup>

Whereas over 80% of plastic pollution to the ocean comes from urban litter such as polystyrene.<sup>6</sup>

Whereas less than 35% of fast food restaurants' waste does not end up in landfills.<sup>7</sup>

Whereas polystyrene is not biodegradable and does not easily deteriorate in landfills, taking up more space than paper.<sup>7</sup>

Whereas polystyrene is not biodegradable and does not easily deteriorate in landfills, taking up more space than paper<sup>3</sup>

Whereas programs to recycle polystyrene are expensive, costing thousands of dollars per ton and litter clean-up costs billions.<sup>6</sup>

Whereas polystyrene is not recycled because it is not economic to wash, degrease, transport, and store in order to recycle.<sup>3</sup>

Whereas over 100 American, Canadian, European and Asian cities and towns have enacted a polystyrene ban.<sup>3</sup>

Therefore it is the intention of the Winthrop Board of Health to prohibit the purchase, sale, distribution, and use of any expanded polystyrene disposable food container used to serve prepared food or beverage in a food serving establishment.

**B. Authority:**

This regulation is promulgated to the authority granted to the Winthrop Board of Health by Massachusetts General Laws Chapter 111, Section 31 that “Boards of Health may make reasonable health regulations”.

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<sup>6</sup> Californians Against Waste, (2014), *The Problem of Polystyrene*. Retrieved from: [http://www.cawrecycles.org/issues/plastic\\_campaign/polystyrene/problem](http://www.cawrecycles.org/issues/plastic_campaign/polystyrene/problem).

<sup>7</sup> Californians Against Waste, (2014), *Polystyrene Takeout Food Packaging Pollution*. Retrieved from: [http://www.cawrecycles.org/issues/plastic\\_campaign/polystyrene](http://www.cawrecycles.org/issues/plastic_campaign/polystyrene).



### **C. Definitions**

For the purpose of this regulation, the following words shall have the following meanings:

**Disposable Food Container:** Single use disposable containers used for the purpose of serving and transporting prepared, and ready-to-consume food or beverages. This includes but is not limited to plates, cups, bowls, trays, and hinged or lidded containers. This does not include single-use packaging for unprepared food, nor single-use items such as disposable straws, cup lids, or utensils.

**Expanded Polystyrene (EPS):** Polystyrene that has been expanded or “blown” using a gaseous blowing agent into a solid form.

**Food Establishment:** An operation that stores, prepares, packages, serves, vends or otherwise provides food for human consumption, as further defined in 105 CMR 590.002. Any establishment requiring a permit to operate in accordance with the State Food Code, 105 CMR 590.000, et. seq., shall be considered a food establishment for purposes of this Board of Health regulation.

**Polystyrene:** Can also be referred to as “Styrofoam”, a trademarked brand owned by the Dow Chemical Company. A type of expanded polystyrene, a thermoplastic petrochemical material utilizing a styrene monomer and processed by any number of techniques including, but not limited to, fusion of polymer spheres (expandable bead polystyrene), injection molding, form molding, and extrusion-blow molding (extruded foam polystyrene). Polystyrene also refers to clear or solid polystyrene, also known as “oriented polystyrene”.

**Prepared Food:** Food and beverage prepared on the food provider’s premises for consumption using any food preparation or cooking technique. This does not include unprepared food such as uncooked raw meat, fish or eggs unless provided for consumption without further food preparation.

**Styrene:** A colorless, flammable liquid, characterized with a sweet odor and high volatility. This industrial chemical is used to make polystyrene.

### **D. Prohibition**

No food establishment shall use disposable food containers made from expanded polystyrene to provide prepared food to customers. No person shall purchase, offer for purchase, sell, give away, or distribute any expanded polystyrene disposable food container from a food serving establishment.

### **E. Violations**

1. It shall be the responsibility of the establishment, state food code permit holder and/ or his or her business agent to ensure compliance with this regulation pertaining to the prohibition of his or her distribution of expanded polystyrene disposable food containers in their establishment.

The violator shall receive:

a. In the case of the first violation, a fine of one hundred dollars (\$100.00).

b. In the case of a second violation within 24 months of the date of the current violation, a fine of two hundred dollars (\$200.00) and the state food code permit may be suspended for seven (7) consecutive business days by the Winthrop Board of Health.

c. In the case of three or more violations within a 24 month period, a fine of three hundred dollars (\$300.00) and the state food code permit shall be suspended for thirty (30) consecutive business days.

### **F. Non-Criminal Disposition**

Whoever violates any provision of this regulation may be penalized by the non-criminal method of disposition as provided in Massachusetts General Laws, Chapter 40, Section 21D or by filing a criminal complaint at the appropriate venue.

Each day any violation exists shall be deemed to be a separate offense.

### **H. Enforcement**

Enforcement of this regulation shall be by the Winthrop Board of Health or its designated agent(s).


Any person who desires to register a complaint pursuant to the regulation may do so by contacting the Winthrop Board of Health or its designated agent(s) and the Board shall investigate.

### **I. Severability**

If any provision of this regulation is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.

### **J. Effective Date**

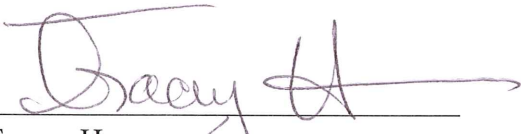
This regulation shall take effect on January 1<sup>st</sup>, 2017.



Nick LoConte,  
Chairperson, Winthrop Board of Health

26 July 2016

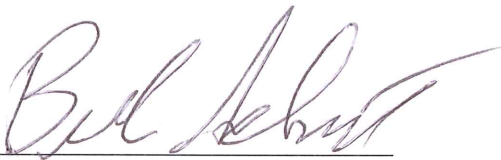
Date



Tracey Honan  
Vice-Chair, Winthrop Board of Health

26 JUL 2016

Date



Bill Schmidt  
Secretary, Winthrop Board of Health

7/26/16

Date