DART Environmental Foam & Facts

Polystyrene foam can be recycled as part of an integrated solid waste management strategy.

Many cities throughout the United States are implementing recycling programs for polystyrene foam that include post-consumer foam cups and take-out containers. Unlike some popular alternative packaging, foam products are only made with one material, polystyrene. This simplicity helps make foam recycling more efficient. For a list of drop-off and curbside recycling programs for foam, go to www.dart.biz/recycle or www.HomeForFoam.com.

The manufacture of Dart polystyrene foam products does not deplete the ozone layer.

Dart polystyrene foam products are not manufactured with chlorofluorocarbons (CFCs) or any other ozone-depleting chemicals. Moreover, Dart Container Corporation never used CFCs in the manufacture of foam cups. Those foodservice manufacturers of polystyrene foam that employed CFCs in their manufacturing processes ceased using them by 1990.¹ According to the EPA, polystyrene foam foodservice products constitute less than 1 percent, by both weight and volume, of our country's municipal solid waste and according to a 1992 study published in Smithsonian Magazine, only about 10% of all foam manufactured during the past decade was used for fast food packaging.²

Polystyrene foam is composed of carbon and hydrogen. When properly incinerated polystyrene foam leaves only carbon dioxide, water, and trace amounts of ash.³ In modern waste-to-energy incinerators, the energy generated by the incineration of polystyrene foam cups and other solid waste can provide heat and light for neighboring communities.⁴

> According to a study researched by Franklin Associates, Ltd., a widely respected firm that has conducted other research for the US EPA, polystyrene foam compares favorably to paper cups when life cycle inventory data for energy usage, solid waste, air emissions and greenhouse gas emissions is evaluated over their entire life cycle.



Hot Cup Comparison Summary EPS **EPS** Vs. Vs. **Polyethylene Coated PE/Paper and** Paper Hot Cup (PE/Paper) **Corrugated Sleeve Energy Usage** Solid Waste weight Solid Waste volume ÷ **Air Emissions** Water Emissions

Key: + Advantage EPS = No significant difference - Disadvantage EPS

In summary, EPS overwhelmingly wins all 6 out of 6 categories against a paper cup with a sleeve, and wins 4 out of 6 against a paper cup without a sleeve while tying the remaining 2 categories.

GHG Emissions

Notes

¹ Judd H. Alexander, In Defense of Garbage (Westport, CT: Praeger Publishers, 1993) p. 55.

² According to a 1998 report by Franklin Associates, Ltd., polystyrene and other plastic products do not comprise the largest volume of material within the waste stream. Indeed, the report concludes that paper and yard trimmings together constitute about 51.6 percent of generation. Thus, while it may be preferable to divert all materials from landfills whenever possible, polystyrene foam does not present the paramount problem for municipal solid waste or, for that matter, landfill capacity. In fact, when polystyrene foam products are buried in landfills, they are as stable and harmless as rocks, concrete, and other inert materials. William Rathje and Cullen Murphy, "Five Major Myths About Garbage, and Why They're Wrong," *Smithsonian*, July 1992, p. 3. See also: Franklin Associates, Ltd., *Waste Management and Reduction Trends in the Polystyrene Industry, 1974–1994*, June 1996, p. 7; Updated August 1999; and *Municipal Solid Waste in the United States, 2009 Facts and Figures*. United States Environmental Protection Agency Office of Solid Waste, December, 2010.

³ The Polystyrene Packaging Council, *Polystyrene and Its Raw Material, Styrene: Manufacture and Use*, November 1993, pp. 27–28.

⁴ In past years, waste-to-energy has been viewed negatively by persons concerned about the environmental effects of incinerations. As technology has improved, however, modern incinerators have become a safe and effective method of handling many post-consumer materials. According to Franklin Associates, Ltd., a leading solid waste consulting firm, "At some point after 2000, the use of finite resources, e.g. fossil fuels, may lead to a more welcoming climate for expansion of waste-to-energy as an alternative solid waste management technique." Franklin Associates, Ltd., *Solid Waste Management at the Crossroads*, December 1997, p. 1-24.

⁵ Franklin Associates, Ltd., Final Peer-Reviewed Report: Life Cycle Inventory of Polystyrene Foam, Bleached Paperboard, and Corrugated Paperboard Foodservice Products (Prepared for The Polystyrene Packaging Council, March 2006), Chapter 2, p. 7 (Table 2-2), Chapter 2, p. 33 (Table 2-10), Chapter 2, p. 34 (Table 2-14), Chapter 2, p. 38 (Table 2-18).

DART CONTAINER CORPORATION

The Industry Standard of Excellence Mason, Michigan 48854 U.S.A. Ph: 800-248-5960 • Fax: 517-676-3883 Email: sales@dart.biz • www.dart.biz



Green Care: Putting Stewardship into Practice

The concept of efficiency is at the heart of Dart's mission and purpose. Our mission statement says: "Dart sets the industry standard of excellence by efficiently providing high quality foodservice packaging solutions and exceptionally reliable service."

The dictionary defines "efficiency" as producing effectively with a minimum of waste. Efficiency is the cornerstone upon which Dart's business decisions are made. As our mission statement notes, efficiency occupies this central position because it drives creative solutions.

Dart's ongoing drive for efficiency has reaped an extraordinary harvest in reductions of our carbon footprint.¹ From the lighting fixtures in our offices to the technologies on our factory floors, each element of our business is scrutinized for means by which we may reduce energy consumption, air emissions, and solid wastes.

Add it all up and, conservatively, we estimate that as of 2006 Dart's diligent stewardship² efforts in pursuit of sustainability³ have produced energy savings totaling approximately 8.4 trillion BTUs per year and 5 million watts. That's enough energy saved each year to heat nearly 105,000 homes and power over 3,000 homes!

Energy Conservation: Fuel

- Dart recovers waste heat from its manufacturing processes and uses it to heat buildings and boiler feed water.
- Dart's Leola, Pennsylvania plant uses landfill gas to run the boilers for its foam cup production and the ovens for its oriented polystyrene operations, resulting in a net reduction in greenhouse gas emissions.
- Modernization of Dart's truck fleet has resulted in reductions in the amount of fuel per mile consumed.
- Through proprietary innovations, Dart uses less energy to make foam cups than it did earlier in its history.

Energy Conservation: Electricity

- As a general rule, Dart uses the most efficient appropriate lighting source for each specific application.
- Dart uses electronic ballasts and lower-wattage fluorescent lights.
- Watts per square foot are reduced in warehousing operations using metal halide or sodium vapor lighting.
- Time clocks and photocell motion detectors are used on exterior and some interior lighting to minimize energy use.

- Dart uses LED (light-emitting diode) indicators instead of incandescent indicators (120 Volt AC version). LEDs use less energy and last significantly longer (100,000 hours compared to less than 20,000 hours for incandescent indicators), thereby reducing waste.
- Dart participates voluntarily in equipment and lighting shutdowns to support local electric company needs during times of high usage.
- Dart employs automated building control systems on HVAC units with night setback and occupied/unoccupied modes.
- Economizers are placed on all major HVAC units.
- Power factor correction is used, as needed, on electrical services.
- Dart has updated several direct current (DC) motor/drive applications to more energy-efficient alternating current (AC) systems.
- Dart specifies high efficiency motors on the equipment the company manufactures and uses.
- Dart's Leola, Pennsylvania plant is actively investigating obtaining access to additional landfill gas to run on-site electrical generators.

Air Emissions

- Dart foam products are not manufactured with CFCs (chlorofluorocarbons) or HCFCs (hydrochlorofluorocarbons). Instead, they are made with pentane.
- Dart has led the expanded polystyrene (EPS) foam cup industry in reducing pentane emissions by capturing pentane emitted during the manufacturing process and using it to make steam for the production of foam products.
- Dart's EPS polymer plants capture and reuse pentane emissions.
- By using non-solvent-based inks, Dart avoids solvent emissions.

Source Reduction

- As a general rule, wherever feasible, Dart uses fewer raw materials to make the same product.
- Many Dart products have been source reduced over time without altering performance.
- Dart packaging film has been source reduced over time.
- Dart corrugated cartons have been source reduced over time.

Reuse

- Dart routinely reuses the pallets, corrugated cartons, and bulk bags used to transport EPS bead from its polymer plants to its cup plants.
- Dart reuses computers and office furniture in order to extend their useful lives to the fullest.
- Conservation and recycling controls enable the continual reuse of water in manufacturing process water systems.

Recycling

- All of Dart's manufacturing facilities, business offices, and fleet departments incorporate recycling into their daily activities. As a result, Dart recycles millions of pounds of materials each year including industrial scrap paper and plastics, hydraulic oil, motor oil, tires, batteries, corrugated containers, electronic discards, fluorescent light bulbs, scrap metal, aluminum, and many more materials.
- Dart strongly supports and has assumed leadership roles in industry associations that are working diligently to advance recycling and/or composting for the products Dart produces including paper, bagasse, PET, polypropylene, polystyrene, expanded polystyrene, and PLA foodservice containers.
- Dart has public drop-offs for expanded polystyrene products at facilities in Argentina, Brazil, Canada, England, Mexico, and in the United States where most types of foam #6 are accepted, including products Dart doesn't even produce.
- Dart operates two reclamation facilities that have wash and dry technologies so even dirty post-consumer foam can be recycled.
- In 1990 we introduced an innovative Cups Are REcyclable program ("CARE") which enables large end-users of Dart foam foodservice products to efficiently collect and compact their post-consumer foam so it can be recycled. This program continues to satisfy may establishments today.
- Dart also has a U.S. mail-back program for foam foodservice containers called Recycla-Pak[™] in which customers purchase a corrugated container from Dart that serves as a foam cup collection device as well as a shipping container. The foam is then returned to Dart so it can be recycled.
- In an effort to facilitate the growth in post-consumer foam recycling, Dart has sponsored a website that educates the public, municipalities, and schools how foam can be recycled. It includes lists of buyers and sellers of foam #6, foam recycling equipment providers, and much more. For more details, go to www.HomeForFoam.com.

- 2 "Stewardship" emphasizes implementation and entails managing our natural resources to ensure that they are available for present and future generations.
- 3 "Sustainability" implies meeting the needs of the present without compromising the ability of future generations to meet their needs.

DART CONTAINER CORPORATION

©2015 Dart Container Corporation. All rights reserved. Dart®, the Dart logo, and Recycla-Pak™ are trademarks of Dart Container Corporation. Used with permission M399USED_082515

^{1 &}quot;Carbon footprint" is the total amount of greenhouse gases, including carbon dioxide and methane, emitted over the life cycle of a product or service.

Your Recycling Gets Recycled, Right? Maybe, or Maybe Not

Plastics and papers from dozens of American cities and towns are being dumped in landfills after China stopped recycling most "foreign garbage."

By Livia Albeck-Ripka

May 29, 2018

Oregon is serious about recycling. Its residents are accustomed to dutifully separating milk cartons, yogurt containers, cereal boxes and kombucha bottles from their trash to divert them from the landfill. But this year, because of a far-reaching rule change in China, some of the recyclables are ending up in the local dump anyway.

In recent months, in fact, thousands of tons of material left curbside for recycling in dozens of American cities and towns — including several in Oregon — have gone to landfills.

In the past, the municipalities would have shipped much of their used paper, plastics and other scrap materials to China for processing. But as part of a broad antipollution campaign, China announced last summer that it no longer wanted to import "foreign garbage." Since Jan. 1 it has banned imports of various types of plastic and paper, and tightened standards for materials it does accept.

While some waste managers already send their recyclable materials to be processed domestically, or are shipping more to other countries, others have been unable to find a substitute for the Chinese market. "All of a sudden, material being collected on the street doesn't have a place to go," said Pete Keller, vice president of recycling and sustainability at Republic Services, one of the largest waste managers in the country. China's stricter requirements also mean that loads of recycling are more likely to be considered contaminated if they contain materials that are not recyclable. That has compounded a problem that waste managers call wishful or aspirational recycling: people setting aside items for recycling because they believe or hope they are recyclable, even when they aren't.

[Here's a guide to avoiding "aspirational recycling." First lesson: Don't recycle greasy pizza boxes.]

In the Pacific Northwest, Republic has diverted more than 2,000 tons of paper to landfills since the Chinese ban came into effect, Mr. Keller said. The company has been unable to move that material to a market "at any price or cost," he said. Though Republic is dumping only a small portion of its total inventory so far — the company handles over five million tons of recyclables nationwide each year — it sent little to no paper to landfills last year.

But for smaller companies, like Rogue Disposal and Recycling, which serves much of Oregon, the Chinese ban has upended operations. Rogue sent all its recycling to landfills for the first few months of the year, said Garry Penning, a spokesman.



Wiqan Ang for The New York Times

Western states, which have relied the most on Chinese recycling plants, have been hit especially hard. In some areas — like Eugene, Ore., and parts of Idaho, Washington, Alaska and Hawaii — local officials and garbage haulers will no longer accept certain items for recycling, in some cases refusing most plastics, glass and certain types of paper. Instead, they say, customers should throw these items in the trash.

Theresa Byrne, who lives in Salem, Ore., said the city took too long to inform residents that most plastics and egg and milk cartons were now considered garbage. "I was angry," she said. "I believe in recycling."

Other communities, like Grants Pass, Ore., home to about 37,000 people, are continuing to encourage their residents to recycle as usual, but the materials are winding up in landfills anyway. Local waste managers said they were concerned that if they told residents to stop recycling, it could be hard to get them to start again.

It is "difficult with the public to turn the spigot on and off," said Brian Fuller, a waste manager with the Oregon Department of Environmental Quality.

The fallout has spread beyond the West Coast. Ben Harvey, the president of E.L. Harvey & Sons, a recycling company based in Westborough, Mass., said that he had around 6,000 tons of paper and cardboard piling up, when he would normally have a couple hundred tons stockpiled. The bales are filling almost half of his 80,000-square-foot facility.

"It's really impacted our day-to-day operations," Mr. Harvey said. "It's stifling me."

Recyclers in Canada, Australia, Britain, Germany and other parts of Europe have also scrambled to find alternatives.

Still, across much of the United States, including most major cities, recycling is continuing as usual. Countries like India, Vietnam and Indonesia are importing more of the materials that are not processed domestically. And some waste companies have responded to China's ban by stockpiling material while looking for new processors, or hoping that China reconsiders its policy. Americans recycle roughly 66 million tons of material each year, according to the most recent figures from the Environmental Protection Agency, about one-third of which is exported. The majority of those exports once went to China, said David Biderman, the executive director of the Solid Waste Association of North America, a research and advocacy group.

But American scrap exports to China fell by about 35 percent in the first two months of this year, after the ban was implemented, said Joseph Pickard, chief economist for the Institute of Scrap Recycling Industries, a trade group.

"It's a huge concern, because China has just been such a dominant overseas market for us," Mr. Pickard said.

In particular, exports of scrap plastic to China, valued at more than \$300 million in 2015, totaled just \$7.6 million in the first quarter of this year, down 90 percent from a year earlier, Mr. Pickard said. Other countries have stepped in to accept more plastics, but total scrap plastic exports are still down by 40 percent this year, he said.

"There is a significant disruption occurring to U.S. recycling programs," Mr. Biderman said. "The concern is if this is the new normal."

Curbside recycling is typically hauled by a private company to a sorting plant, where marketable goods are separated out. Companies or local governments then sell the goods to domestic or overseas processors. Some states and cities prohibit these companies from dumping plastic, paper and cardboard, but some local officials — including in Oregon, Massachusetts and various municipalities in Washington State — have granted waivers so that unmarketable materials can be sent to the landfill.

Recycling companies "used to get paid" by selling off recyclable materials, said Peter Spendelow, a policy analyst for the Department of Environmental Quality in Oregon. "Now they're paying to have someone take it away."

In some places, including parts of Idaho, Maine and Pennsylvania, waste managers are continuing to recycle but are passing higher costs on to customers, or are considering doing so. "There are some states and some markets where mixed paper is at a negative value," said Brent Bell, vice president of recycling at Waste Management, which handles 10 million tons of recycling per year. "We'll let our customers make that decision, if they'd like to pay more and continue to recycle or to pay less and have it go to landfill."

Wiqan Ang for The New York Times

Mr. Spendelow said companies in rural areas, which tend to have higher expenses to get their materials to market, were being hit particularly hard. "They're literally taking trucks straight to the landfill," he said.

Will Posegate, the chief operations officer for Garten Services, which processes recycling for a number of counties in Oregon, said his company had tried to stockpile recyclables but eventually used a waiver to dump roughly 900 tons. "The warehouse builds up so much that it's unsafe," he said. In California, officials are concerned that improperly stored bales of paper could become hazards during wildfire season, said Zoe Heller, the policy director for the state's recycling department.

While China has entirely banned 24 materials, including post-consumer plastic and mixed paper, it has also demanded that other materials, such as cardboard and scrap metal, be only 0.5 percent impure. Even a small amount of food scraps or other rubbish, if undetected, can ruin a batch of recycling.

Some waste managers say that China's new contamination standards are impossible to meet, while others are trying to clean up their recycling streams by slowing down their processing facilities, limiting the types of materials they accept or trying to better educate customers on what belongs in the recycling bin.

Waste traveling along a conveyor belt to be sorted. Wiqan Ang for The New York Times

Mr. Bell, the Waste Management executive, said he had seen everything from Christmas lights to animal carcasses to artillery shells come through the company's recycling facilities. "Most of our facilities get a bowling ball every day or two," he said.

Some materials can ruin a load, he said, while others pose fire or health hazards and can force facilities to slow their operations and in some cases temporarily shut down. (And a bowling ball could do serious damage to the equipment.) Approximately 25 percent of all recycling picked up by Waste Management is contaminated to the point that it is sent to landfills, Mr. Bell said.

Recyclers have always disposed of some of their materials. But the percentage has climbed as China and other buyers of recyclable material have ratcheted up quality standards.

Most contamination, Mr. Bell said, happens when people try to recycle materials they shouldn't. Disposable coffee cups — which are usually lined with a thin film that makes them liquid-proof but challenging and expensive to reprocess — are an example. Unwashed plastics can also cause contamination.

"If we don't get it clean, we're not going to be able to market it, and if we can't market it unfortunately it's going to go to the landfill," said Mr. Penning, the Rogue spokesman. In March, Rogue told customers to put everything in the trash except for corrugated cardboard, milk jugs, newspapers and tin and aluminum cans, which the company is finding domestic markets for, Mr. Penning said.

Rogue customers who make mistakes might see an "Oops" sticker the next time they check their recycling bin, he said.

In Eugene, similar restrictions have been imposed by the waste company Sanipac. These have not sat well with some residents. "Eugene is a very green city and people love their recycling here," said Diane Peterson, a resident. "There are a lot of things like yogurt containers that we get all the time, and now we can't recycle them."

Leah Geocaris, another Eugene resident, said the change had prompted her to try to consume less overall. "On the one hand, I hate it, because I don't want stuff to end up in landfill," she said. "On the other hand, it's a wake-up call."

"Recycling is the third R," she said. "You have to reduce and reuse first."

Here's how to recycle smarter



6 Things You're Recycling Wrong

Can you recycle coffee cups or greasy pizza boxes? If you're tossing things in the recycling bin out of sheer hope, you might be an "aspirational recycler."

May 29, 2018

Livia Albeck-Ripka, a former James Reston reporting fellow at The Times, is a freelance journalist covering the environment. @livia_ar

6 Things You're Recycling Wrong

Can you recycle coffee cups or greasy pizza boxes? If you're tossing things in the recycling bin out of sheer hope, you might be an "aspirational recycler."

By Livia Albeck-Ripka

May 29, 2018



Tony Cenicola/The New York Times

We have all done it: a greasy pizza box, a disposable coffee cup, the odd plastic bag. Sometimes, we want things to be recyclable, so we put them in the recycling bin.

Waste managers often call this wishful or aspirational recycling. But, unfortunately, putting these objects in with the rest of the recycling can do more harm than good. While rules differ in every municipality (check your local recycling website to find out what's acceptable), we have picked out some key offenders to keep in mind.

Too many of these items will contaminate a batch of recycling. That means waste managers might not be able to find buyers for the materials — especially now that China, one of the world's main importers of recyclable waste, has said it will reject shipments that are more than 0.5 percent impure. Contaminated loads could be sent to the landfill instead.

Disposable cups

Tony Cenicola/The New York Times

Your disposable coffee cup might seem like it can be recycled, but most single-use cups are lined with a fine film of polyethylene, which makes the cups liquid-proof but also difficult and expensive to reprocess (because the materials have to be separated). Most waste management facilities will treat the cups as trash.

If you're putting these cups in with your recycling, they are likely contaminating the rest of the materials, said Jim Ace, a senior campaigner at Stand.earth, an environmental group. In an experiment this year, the group affixed electronic trackers inside Starbucks cups, put the cups in recycling bins in Denver, then traced them to a landfill.

You have 3 free articles remaining. Subscribe to The Times

"There's no way a consumer would know if a cup was lined," Mr. Ace said, so it's best to throw it away. (You can also check if your local recycler has special equipment to handle coffee cups; some do, a Starbucks spokeswoman said. The New York City Department of Sanitation says it accepts "paper cups with non-paper lining.")

The plastic lid might be recyclable in your area; check the number inside it against your local recycling guidelines.

Greasy pizza boxes

Tony Cenicola/The New York Times

Pizza boxes are among the most common offenders when it comes to contamination, waste managers say. The problem is that oil often seeps into the cardboard. The oil cannot be separated from the fiber, making that material less valuable, and less marketable, to buyers.

But that's not to say you can never recycle a pizza box, said Marjorie Griek, executive director of the National Recycling Coalition, which promotes recycling in the United States. "If you've got a few crumbs in there, that's not an issue," she said.

Pizza boxes with "small amounts of grease" are O.K. to recycle in New York City, a sanitation department spokeswoman said. If the grease seeps through the cardboard, the box should be put in a composting bin or thrown out, she said.

Remember, there are also two sides to a pizza box. If there's a side that's not oily, tear that off and recycle it.

Yogurt cups (and other non-recyclable plastics)

After China banned used plastics this year, many municipalities in the United States no longer accept plastics numbered 3 to 7, which can include things like yogurt cups, butter tubs and vegetable oil bottles. Look at the bottom of a container for a number inside a triangle to see what type it is.

Without China, there is little market for these types of plastic, said Will Posegate, chief operations officer for Garten Services, which manages waste in parts of Oregon. "It's expensive to get rid of it right now," he said.

Should you keep the caps on your bottles? Some waste managers say it's fine (as long as they are screwed on tight), while others advise throwing them in the trash.

Check your local recycling website to see which plastic types are still acceptable in your area.

Oily takeout containers

Tony Cenicola/The New York Times

Even if a container is labeled correctly for recycling in your area, another contamination culprit is food residue: scraps of pad thai in a plastic tray, or those few drops of bad milk at the bottom of the jug.

Washing out food scraps from recyclables can be just as important as putting the right thing in the recycling bin, said Jackie Lang, a spokeswoman for Waste Management in Oregon. You don't have to scrub containers until they are sparkling clean — that could waste water. But too many scraps of food and liquid can contaminate a load, which could then be sent to a landfill, Ms. Lang said. As much as possible, "keep food and liquids out," she said.

Plastic bags

Tony Cenicola/The New York Times

If you have a trash chute in your building, or a long walk down to the recycling bin, you might have gotten into the habit of collecting your paper, plastics and glass in used plastic bags, but it's important to note that the bags themselves should not be put in the recycling cart.

While we might wish that plastic bags — notorious for dissolving into microplastics and killing wildlife — could be sent to processors with our other recycling, they shouldn't be. They create a nightmare for waste managers by plugging up machinery. So remember to dump your recyclables out of the plastic bag when putting them in the recycling bin. Some areas do offer plastic bag drop-offs, which send these nonrigid plastics to special facilities for recycling. Other cities and states have moved to tax, limit or ban the use of plastic bags altogether.

Dirty diapers (yes, people do this)

Tony Cenicola/The New York Times

O.K., we're not accusing you of attempting to recycle used diapers. But people out there are trying. Waste managers around the United States say they turn up at their recycling facilities often.

In some cases, people might think that a diaper should be recyclable because it is mostly made of plastic, said Garry Penning, a spokesman for Rogue Disposal and Recycling, which operates throughout Oregon. But diapers are made of a number of materials, and usually more than one type of plastic. Of course, once they are used, they are also filled with human waste.

In other cases, Mr. Penning said, the recycling bin has simply become "the overflow for the garbage pail." While there have been some attempts at diaper recycling, for the most part dirty one-use diapers are not considered recyclable and are best put straight in the trash.

"As a result of China's waste import restrictions, we need to educate the public how to recycle properly," said David Biderman, executive director of the Solid Waste Association of North America. "I think the public can make a significant difference," he said.

More about what's changed this year

Your Recycling Gets Recycled, Right? Maybe, or Maybe Not

Plastics and papers from dozens of American cities and towns are being dumped in landfills after China stopped recycling most "foreign garbage."



Livia Albeck-Ripka, a former James Reston reporting fellow at The Times, is a freelance journalist covering the environment. @livia_ar

A version of this article appears in print on May 31, 2018, on Page B5 of the New York edition with the headline: 6 Things You're Recycling Wrong

MARYLAND RETAILERS ASSOCIATION

The Voice of Retailing in Maryland



Discussion on Polystyrene Product Impact on Carroll County Attention: Honorable Carroll County Environmental Advisory Council (EAC) and Commissioners August 13, 2018 MRA Position: OPPOSE ANY AND ALL RESEARTICTIONS

- 1. We agree with protecting Marylanders from potentially harmful products, but there simply are not facts to support the proponent's arguments that polystyrene is harmful. If you conduct a thorough investigation of the literature, or even google the topic, there is not one piece of academically vetted research that supports their claims. The websites this information is coming from are sites like bottomlineinc.com drfeelgood.com or well.com.
- 2. Proponents point to studies about styrene which is not the same chemical compound as polystyrene. It is important to understand that styrene is a chemical building block that is not chemically active in the long chain polymer that forms polystyrene. If styrene is truly the concern, it occurs naturally in many foods we consume such as coffee, meat, strawberries, peaches etc. so if you are going to ban it, you must also ban all of those items too.
- 3. There are business owners and non-profits such as Meals on Wheels who can show you that similar products are flat out not "cost neutral to businesses." Additionally, one of the manufacturers of the product Dart, will show there is absolutely a cost increase of double or triple costs to product alternatives.
- It is also important to point out that because many of these alternatives are also not biodegradable or recyclable, they will go to landfill or incinerators. This increases costs for taxpayers, counties and our state.
- 5. Polystyrene can be recycled, and we can do something meaningful with this issue. At no charge to the state, both Dart in seven counties and EPS across the state have polystyrene drop off locations at no charge, but there is no reason when counties negotiate their waste management and recycling contracts, they cannot add polystyrene to single stream recycling. This is a potentially new revenue stream for counties and would make it easier for consumers to recycle the product.
- 6. We also respectfully ask the Council to think about the impact on brick and mortar stores. The bill before you says nothing about online sales and for consumers that want to purchase it, they merely have to go online to buy it, driving further business away from our members.
- 7. Finally, although the bill exempts meat and seafood products, it is important to point out that vegetables such as mushrooms as well as mixed meat and seafood products put together in stores such as kababs are not explicitly exempt from the bill.

We encourage the Council and Commissioners to work with us to create expanded polystyrene recycling in our state. Banning products does not address the underlying issues we all care about which are in fact litter and recycling.





Expanded Polystyrene (EPS) - Foodservice Product Bans

August 13, 2018

Position: OPPOSE

The Restaurant Association of Maryland opposes efforts to ban or restrict the use of expanded polystyrene (EPS) foodservice products. Such policies significantly increase the cost of disposables, for businesses currently using EPS, without any measurable environmental or health benefit.

We understand and share the goal of reducing litter. However, there are many types of litter and it is not specific to any one industry. Forcing businesses to use alternative packaging does not reduce total litter, as the alternatives will be littered instead. Addressing the problem of litter must begin by addressing irresponsible human behavior.

Ban supporters often imply that paper and compostable alternatives will naturally biodegrade in the litter stream. This is misleading. Polyethylene-coated paper alternatives, for example, are not biodegradable. And compostable alternatives do not naturally biodegrade. Those materials must be collected and sent to commercial composting facilities to fully break down as designed. And claims that compostable materials break down better in landfills are irrelevant because modern landfills are designed to retard degradation because of potentially harmful gases and leachate.

Alternative disposables generally cost double to triple the price of EPS products currently used (see cost comparison examples on page 2). Such costs are difficult to absorb for narrow-profit margin industries like ours (average industry profit margin is 4 percent), and are tough to pass on to price-sensitive customers.

Restaurants that use EPS do so because it is a cost-effective way of maintaining food temperature. This is especially important for hot food. Most alternatives simply do not have the same insulating properties. Restaurants also use other types of foodservice packaging material. However, such decisions should be made by business owners based on their specific needs and price they can afford.

Some restaurants have been able to afford alternative foodservice containers. But there are many types of restaurants and once size does not fit all. Those businesses that can afford to switch to alternatives will continue to do so as they can afford it. However, EPS product bans disproportionately burden those businesses that can least afford the higher cost of alternatives.

With regard to the safety of EPS products, the U.S. Food and Drug Administration (FDA) has long confirmed polystyrene to be safe for use in direct contact with food and beverages. Naturally occurring styrene is present in some foods, such as cinnamon, coffee beans and peanuts. And, according to FDA, limited use of styrene is also generally recognized as safe when used as part of flavoring agents for foods such as ice cream, candy and baked goods.

It is for these reasons that we oppose EPS foodservice product bans.

Cost comparison examples from a local supplier (February 2018):

Standard 8" EPS Disposable Clamshell = \$0.09/each Economical Fiber 8" (bagasse) Alternative = \$0.19/each

Standard 12oz EPS Soup Cup = \$0.08/each Coated Paper 12oz Alternative = \$0.20/each

Annual cost difference example for high-volume take-out/delivery using 500 containers/week:

Standard EPS Disposable Clamshell = \$2,340/year Economical Fiber (bagasse) Alternative = \$4,940/year

Standard EPS Soup Cup = \$2,080/year Coated Paper Alternative = \$5,200/year