Agenda Item 9A
January 20, 2015
Action

MEMORANDUM

January 15, 2015

TO: County Council

FROM: Josh Hamlin, Legislative Attorney

SUBJECT: **Action:** Bill 41-14, Solid Waste (Trash) – Food Service Products – Packaging Materials – Requirements

Transportation, Infrastructure, Energy and Environment Committee recommendation (3-0): enact Bill 41-14 with amendments.

Bill 41-14, Solid Waste (Trash) – Food Service Products – Packaging Materials – Requirements, sponsored by Councilmember Riemer, then-Council Vice President Leventhal, and Councilmember Elrich, was introduced on September 9, 2014. A public hearing was held on October 14, 2014, and a Transportation, Infrastructure, Energy and Environment Committee worksession was held on October 30, 2014.

Bill 41-14 would:

(1) prohibit the use of certain expanded polystyrene food service products by food service businesses;
(2) require the use of compostable or recyclable food service ware by the County, County contractors or lessees, and food service businesses;
(3) prohibit the sale of certain expanded polystyrene food service products and polystyrene loose fill packaging;
(4) provide for enforcement; and
(5) generally amend County law regarding environmentally acceptable food service products and packaging materials.

Background

In 2012, the Council approved Resolution No. 17-522, expressing support for the elimination of expanded polystyrene foodware in County Government cafeterias and encouraging other public and private food service facilities to also consider the elimination of the use of polystyrene foodware (See ©8-9). Expanded polystyrene ("polystyrene foam"), frequently and inaccurately referred to as Styrofoam®, a registered trademark of the Dow Chemical Company,[1] is commonly used in disposable food containers, both for prepackaged and carry-out prepared

[1] In a letter dated November 5, 2014, the Dow Chemical Company explained the distinction between Styrofoam® and the expanded polystyrene foam products that are the subject of Bill 41-14, and requested that Councilmembers avoid any references to Styrofoam and instead replace those references with the generic polystyrene term.

food. This Bill builds upon the Council's action in Resolution 17-522, generally prohibiting certain uses of polystyrene foam food service products, prohibiting the sale of certain polystyrene foam products, and requiring the use of compostable or recyclable food service ware. In a September 2 memorandum, Councilmember Riemer briefly discussed the basis for his proposal (See ©10). Proponents of reducing or restricting the use of polystyrene foam say that it is harmful to both the environment and human health.

Environmental Impacts

Advocates for limiting the use of polystyrene foam cite the pervasive presence of the foam as litter in the marine environment as justification for a ban.[2] A local example of this problem has been demonstrated by the "trash trap" in the District of Columbia along Nash Run, which flows into the Anacostia River. According to a 2010 report prepared by the Anacostia Watershed Society for the District Department of Environment, about 22% of average trash volume collected by the trap was polystyrene foam.[3] This problem is not merely aesthetic; like other plastics, polystyrene foam photodegrades, breaking down into smaller and smaller pieces, but never really going away. Fish and other aquatic wildlife often mistake the tiny pieces of foam for food, ingest them, and suffer harm as a result.[4]

Human Health Concerns

Styrene, a main ingredient in making polystyrene foam, is listed as "a reasonable anticipated human carcinogen" in the U.S. Department of Health and Human Service's *Report on Carcinogens, 12th Edition* (2011). The primary risk is to workers improperly exposed to styrene in the manufacturing process, with the primary non-occupational exposure through cigarette smoke. However, styrene may also leach into food from polystyrene containers used for food products, with the level of migration of styrene to food dependent on a number of factors.[5] In September of this year, in light of these health concerns, as well as environmental concerns, several members of the United States House of Representatives sent a letter to House Speaker John A. Boehner, Majority Leader Kevin McCarthy, and Committee on House Administration Chair Candice S. Miller, requesting reconsideration of the use of polystyrene foam in the House of Representatives cafeterias (©11-17).

Laws in Other Jurisdictions

The use of polystyrene foam has been restricted or prohibited in many local jurisdictions, both county and municipal, throughout California and in the Pacific Northwest.[6] Among large

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[2] http://www.cleanwater.org/files/publications/ca/cwa_fact_sheet_polystyrene_litter_2011_03.pdf

[3] See pages ix – xii of "*Demonstration of Trash Reduction Technologies in the Anacostia Watershed (Nash Run Trash Trap Project) Final Technical Report*," found at: http://green.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Nash_Run_TT_Final_Tech_Report_Entire.pdf.

[4] http://www.anchoragemuseum.org/images/downloads/gyre/Lesson3_EffectsofMarineDebris.pdf

[5] http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/styrene.pdf

[6] The cities of Los Angeles, San Francisco, Oakland, and San Jose, and the counties of Marin, Los Angeles, and Santa Cruz are some of the larger California jurisdictions to implement some form of polystyrene foam ban. Seattle, Washington, and Portland Oregon have also done so. A list of cities and counties with such bans can be found at: http://www.groundswell.org/map-which-cities-have-banned-plastic-foam/

jurisdictions on the East coast, New York City enacted a ban in 2013,[7] and the District of Columbia did so in June of this year.[8] A ban has been considered in Baltimore City, but has not been enacted, and bans have been or currently are being considered in Philadelphia, Boston, and Chicago.

Current local laws vary in their scope, with some banning the use of polystyrene foam only for food service, i.e., leftovers and carry-out, while others extend the prohibition to the sale of certain polystyrene foam products, including plates, cups and packing materials. Many of the local laws banning certain uses of polystyrene foam also require that *any* disposable food service ware used for food service businesses, such as plates, cups, utensils, and napkins, be compostable or recyclable.

Bill 41-14

The provisions of Bill 41-14 prohibiting the use of certain polystyrene foam food service products, and requiring the use of compostable or recyclable food service ware, are similar to those of the recently enacted District of Columbia law, with identically staggered effective dates. This consistency between neighboring jurisdictions should make it easier for businesses operating in both jurisdictions to adjust their practices.

Bill 41-14 would prohibit food service businesses (restaurants, grocery stores, institutional cafeterias, etc.) from using "expanded polystyrene (foam) food service products," such as containers, plates, cups, trays, egg cartons, effective January 1, 2016. Products packaged outside the County before receipt by the food service business, and materials used to package raw meat, seafood, or poultry are exempt from the prohibition.

The Bill would also require the County and County contractors and lessees to use compostable or recyclable disposable food service ware, as those terms are defined in the Bill, effective 90 days after the Bill becomes law. "Disposable food service ware" is a broader term than, and inclusive of, "expanded polystyrene food service products." The requirement to use compostable or recyclable disposable food service ware would apply to food service businesses beginning January 1, 2017.

Bill 41-14 would also prohibit the *sale* of polystyrene loose fill packaging, commonly referred to as "packing peanuts," and expanded polystyrene food service products, effective January 1, 2016. This provision is similar to provisions of the law in New York City and several California jurisdictions.

The Executive would be required to publish, and update annually, a list of vendors offering affordable compostable or recyclable disposable food service ware products. Also, the Executive would be required to determine whether there is no affordable compostable or recyclable alternative to particular disposable food service ware items, and list such items on an exemption list. The prohibitions and requirements of the law would not apply to products on the exemption list. The Department of Environmental Protection would be responsible for enforcement of the

[7] http://legistar.council.nyc.gov/View.ashx?M=F&ID=2938756&GUID=5A837168-3319-450D-8A40-FDF597A3E5CC

[8] http://lims.dccouncil.us/_layouts/15/uploader/Download.aspx?legislationid=30722&filename=B20-0573-SignedAct.pdf (pp.7-9).

law. A violation would be a Class B violation, and the County Attorney would be authorized to seek injunctive relief.

Public Hearing

There were 24 speakers at the public hearing. Dan Locke, Chief of the Division of Solid Waste Services, testified in support of the Bill on behalf of the Executive (©19). Mr. Locke cited the value of the Bill's provisions as a compliment to the County's efforts to reduce litter and pollution in County waterways as required by the County's MS4 permit. Conservation Montgomery (©20), the Sierra Club of Montgomery County (©21-22), the League of Women Voters of Montgomery County (©23), and the D.C. Chapter of the Surfrider Foundation (©24) all testified in support of the Bill. These organizations all expressed the belief that the Bill would reduce the amount of polystyrene foam pollutants in the County.

The Alice Ferguson Foundation (©25-26), the Rock Creek Conservancy (©27-28), Neighbors of the Northwest Branch (©29-30), the Anacostia Watershed Society (©31-35), and the Sugarloaf Citzens' Association (©36) all offered testimony in support of Bill 41-14. These organizations referenced the threats posed by polystyrene foam to human and environmental health, and both the Alice Ferguson Foundation and the Anacostia Watershed Society expressed the view that, like the carryout bag tax, this Bill could be a catalyst for behavior change leading to societal benefit. Molly Hauck also shared her concerns about the polystyrene foam's effects on human health and the environment, and stated that there are competitively priced recyclable and compostable alternatives (©37-38).

Three members of the Young Activists Club in Takoma Park spoke in support of the Bill (©39-43). They asked the Council to consider expanding the Bill's prohibition beyond polystyrene foam to include rigid polystyrene such as that used in some plastic cups and clear plastic "clamshell" containers, and requested that the Bill be applicable to MCPS. Nadine Bloch reiterated the requests of the Young Activists to include rigid polystyrene and MCPS in the Bill's prohibition (©44). Brenda Platt of the Institute for Local Self-Reliance testified in support, offering Seattle as an example of a phased approach to moving from polystyrene foam to recyclable or compostable food service ware (©45-51). Trash Free Maryland and Jennifer Chambers also supported the Bill, echoing many of the sentiments of other supporters (©52-54). Bruce Bereano, on behalf of Safeway, indicated support for the Bill if it was amended to exempt raw and butchered meat, seafood and poultry trays from the Bill's recyclable/compostable requirement.[9]

The Restaurant Association of Maryland opposed the bill as drafted (©55), stating a particular concern about the cost and performance of alternative compostable or recyclable disposable food service ware, positing that much of the required compostable ware will still end up in the regular solid waste stream. However, the Association's members were not as concerned with the prohibition on the use of polystyrene foam food service products.[10] Dart Container Corporation, manufacturer of polystyrene foam food service products, opposed the Bill, touting the efficiency and cost benefits of foam over paper and the recyclability of polystyrene foam (©56-

[9] The Bill already exempts these products from the ban on polystyrene foam food service products. See lines 58-69 at ©4.

[10] See video testimony of Melvin Thompson, Restaurant Association of Maryland, at 00:16:30 of the October 14, 2014 public hearing at: http://montgomerycountymd.granicus.com/MediaPlayer.php?view_id=6&clip_id=8079

63). Dart also offered San Francisco and Carmel, California as examples of jurisdictions where foam bans did not reduce the volume of litter, but rather changed the type of litter.[11] Environmental Resources Planning, LLC also opposed the Bill, contending that polystyrene foam food service products make up a small percentage (1.1%) of litter, and that a foam ban will not resolve litter issues (©64-65). The Maryland Retailers Association opposed Bill 41-14, asserting that its provisions would increase costs without reducing litter or helping the County achieve its sustainability goals (©66-67). Bill Kominers also spoke in opposition, questioning whether there is a legitimate alternative to polystyrene foam packing peanuts.

In addition to the oral testimony at the public hearing, written testimony was received from the American Chemistry Council and Lorenzo Bellamy of Alexander and Cleaver, P.A. (©68-72). Both urged the County to explore recycling polystyrene foam, and the American Chemistry Council disputed the contentions that polystyrene foam presented a threat to human health.

October 30 T&E Committee Worksession

The Committee discussed the Bill and made a number of changes. The Committee recommended enactment of the Bill (3-0) with the following amendments:

1. Expressly exempt a food service business from the requirement to use compostable or recyclable disposable food service ware if the Executive determines that there is no suitable affordable compostable or recyclable product available;
2. Specifically exempt food packaging used for raw/butchered meat, seafood, and poultry from the compostable/recyclable products requirement, consistent with these products already being exempt from the expanded polystyrene ban;
3. Require the Executive to conduct an "education and outreach" program both before and during the implementation of all phases of the law;
4. Delete language creating a private cause of action by allowing an "affected party" to seek injunctive relief; and
5. Change the effective date of the requirement that a County agency, department, contractor or lessee use recyclable or compostable disposable food service ware from 90 days after the Act becomes law to January 1, 2016.

As amended by the Committee, the Bill's effective dates would be:

1. A food service business must not use expanded polystyrene food service products, effective January 1, 2016;
2. A person must not sell expanded polystyrene food service products or packaging materials, effective January 1, 2016;
3. A County agency, contractor, or lessee must use compostable or recyclable food service ware, effective January 1, 2016 (but may exhaust supplies purchased before that date until January 1, 2017); and
4. A food service business must use compostable or recyclable food service ware, effective January 1, 2017.

[11] Note however that San Francisco's 2008 litter audit, conducted one year after the City enacted its polystyrene foam ban, showed a 36% decrease in *polystyrene foam* litter. The 2008 audit can be accessed at: http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/stormwater/MRP/02-2012/Comments/Dart/Staff_Exhibits.pdf

Issues/Committee Recommendations

1. What are the alternatives to polystyrene foam food service and packing products?

A threshold question to considering a prohibition on the use of polystyrene foam is "what are the alternatives?" The demand for food packaging alternatives to foam has been growing at least since the 1990s, when McDonald's phased out the use of foam clamshells for its sandwiches.[12] A number of restaurants have already moved away from using foam food packaging products, and McDonald's, as well as Dunkin' Donuts, have both recently committed to phasing out their use of foam cups.[13] Over the past 15 years, dozens of local jurisdictions have passed restrictions on the use of polystyrene foam.[14] With this growing demand, there is now a fairly robust market of polystyrene foam alternatives,[15] from paper[16] to polylactic acid[17] to mushroom-based foam products.[18] The Green Restaurant Association is a reference resource for these products.[19] San Francisco, whose ban on polystyrene foam food packaging took effect in 2007, has published a list of vendors of compostable and recyclable food service ware (©73-74). Also, San Jose, California, which enacted a polystyrene foam ban in 2013, has published a fairly extensive list of alternative food packaging products, sorted by product category with vendor and cost information (©75-88). Bill 41-14 requires the Executive to publish a similar list of vendors, and update it annually for at least five years after it is first published.

There are also several alternatives to polystyrene foam packing peanuts. In addition to sealed air packing materials which are widely used by online retailers such as Amazon.com,[20] there are packing peanuts available that are plant-[21] and starch-based and biodegradable.[22] U-haul sells a number of recyclable or biodegradable packing supplies on its website, including packing peanuts[23] and paper-based expandable packing material.[24]

2. Is recycling expanded polystyrene a viable alternative to a ban?

In its testimony at the public hearing, Dart Container Corporation suggested that recycling polystyrene foam would be an alternative to banning it. Dart claimed that the foam is "100% recyclable" into pellets used for durable plastic products such as building insulation, plastic lumber, and picture frames. Dart cited Sacramento and Los Angeles, California as examples of municipal curbside collection of polystyrene foam, and said that the company is working to establish other such programs.

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[12] http://www.nytimes.com/1990/11/02/business/packaging-and-public-image-mcdonald-s-fills-a-big-order.html McDonald's competitors Burger King and Wendy's had already stopped using foam clamshells by this time.
[13] http://www.bloomberg.com/news/2014-09-17/dunkin-donuts-tests-recyclable-cups-as-foam-loses-favor.html
[14] See footnote 5.
[15] http://www.sustainablefoodservice.com/cat/biodegradable-foodservice-products.htm
[16] http://www.fold-pak.com/sustainability/sustainablepackagingsolutions.htm
[17] http://www.plasticingenuity.com/green-ingenuity/pla-materials/
[18] http://www.ecovativedesign.com/
[19] http://www.dinegreen.com/restaurants/endorsed_prods.asp
[20] http://www.sealedairprotects.com/NA/EN/sustainability/recycle_inflate.aspx
[21] http://puffystufftn.com/about.html
[22] http://www.starchtech.com/biodegradable-packing-peanuts.html
[23] http://www.uhaul.com/MovingSupplies/Protective-stuff/Biodegradable-Packing-Peanuts?id=730
[24] http://www.uhaul.com/MovingSupplies/Protective-stuff/ExpandOS-High-Performance-Packing-Material?id=15962

The question of the recyclability of polystyrene foam arises each time a jurisdiction considers a ban. When the question arises, so too does a discussion of the problems associated with a foam recycling program (See ©89). The first challenge is the low density of the material, which makes shipping it quite inefficient. The limited market for polystyrene foam also presents a problem, as the lack of a stable market makes investment in establishing a program somewhat risky. There would be a cost involved in setting up a drop-off foam recycling program in the County, as accepting the foam would require an attendant, and staff understands that there is currently no space at the transfer facility to accommodate such a program. Curbside pickup is often not considered feasible because of both the cost and the tendency for foam products to break up and blow away – both related to the low density of the product. Also, even in jurisdictions that provide curbside pickup for foam recycling, few accept packing peanuts.[25]

Perhaps the most vexing problem encountered in recycling polystyrene foam food packaging is food contamination. It is not evident what amount of "contamination" renders foam unrecyclable, but in other jurisdictions that have looked at the issue, contamination has been a substantial problem. In Los Angeles County, California, "a survey of waste haulers and material recovery facilities (MRFs) found that the overwhelming majority of haulers and facilities do not accept EPS food containers from curbside recycling" (See ©90-97). When San Jose was considering its ban in 2011, City staff research found that of 32 California jurisdictions that had implemented curbside collection of polystyrene foam for recycling, 15 were collecting polystyrene foam food packaging but were sending it to the landfill, and eight had discontinued the collection due to contamination issues. As of 2011, only seven of the 32 were actively collecting the foam for recycling (©98-100).

The New York City ban was conditioned on whether or not it was feasible for the city to recycle polystyrene foam. The law required the Sanitation Commissioner to determine "whether EPS [polystyrene foam] single service articles can be recycled at the designated recycling processing facility at the South Brooklyn Marine Terminal in a manner that is environmentally effective, economically feasible, and safe for employees." If polystyrene foam was determined not to be recyclable, the ban would take effect on July 1, 2015. On January 8, 2015, Mayor Bill De Blasio announced that the Department of Sanitation (DSNY) determined that polystyrene foam "cannot be recycled." DSNY also determined that there currently is no market for post-consumer EPS collected in a curbside metal, glass, and plastic recycling program. See ©144. These determinations mean that the New York City ban, which prohibits food service establishments, stores and manufacturers from possessing, selling, or offering for use single service polystyrene foam articles or polystyrene loose fill packaging, such as "packing peanuts" will take effect.

3. Will "compostable" disposable food service ware required by the Bill be composted, or will it still end up in the trash?

The Restaurant Association of Maryland expressed concern at the public hearing regarding the Bill's requirement that all disposable food service ware be recyclable or compostable by January 1, 2017. By suggesting that even compostable or recyclable products would end up in a landfill, the issue was framed as the imposition of an expense on food service businesses that would not produce a corresponding social benefit. In the absence of an existing County composting program, this suggestion is a valid concern. It must also be considered that in common

[25] http://www.earth911.com/recycling-guide/how-to-recycle-packing-peanuts/

anaerobic landfills, even biodegradable or compostable items do not break down due to lack of the oxygen and microorganisms necessary for degradation or decomposition.

The question is really one of timing. The County's approved Comprehensive Solid Waste Plan[26] includes as part of its summary plan of action to "examine the feasibility of targeting additional materials types for recycling including food waste generated at restaurants, schools and institutions." (©101-102) Prince George's County[27] and Howard County,[28] as well as Takoma Park,[29] are currently piloting food waste composting programs, and the District of Columbia recently passed a polystyrene ban that includes a compostable/recyclable mandate. These developments may create momentum to begin a regional food waste composting program. Requiring disposable food service ware to be compostable or recyclable facilitate this action item by removing non-compostable disposable food service ware as a potential contaminant of compostable food waste. Facilities such as Jepson Prairie Organics[30] and Cedar Grove[31] in Washington are examples of composting facilities that compost food service ware. Location of a facility in the densely populated Mid-Atlantic region may prove challenging, however; Peninsula Compost LLC's Wilmington Organics composting facility was recently ordered to shut down due to odor problems.[32]

The Committee discussed the Section 48-54 exemption from the required use of compostable or recyclable disposable food service ware when "the Executive determines that there is no suitable affordable compostable or recyclable product available . . ." The Committee noted that this exemption was expressly applicable to a County facility, agency or department (Section 48-54(a)), and a County contractor or lessee (Section 48-54(b)), but the Bill was not clear as to whether the exemption applied to a food service business. The Committee recommended clearly stating that such an exemption does apply to a food service business.

Committee recommendation (3-0): Amend Section 48-54 to expressly state that a food service business providing food or beverages for consumption on or off premises in disposable food service ware must use compostable or recyclable disposable food service ware *unless the Executive determines that there is no suitable affordable compostable or recyclable product available.* (See lines 72-75 at © 4).

4. Should the Bill's prohibitions include rigid polystyrene food service products?

There were requests at the public hearing from members of the Young Activists Club, and from the Institute for Local Self-Reliance, to expand the Bill's prohibition to rigid polystyrene products in addition to polystyrene foam. Such an expansion would then cover many of the plastic

[26] http://www.montgomerycountymd.gov/sws/programs/solid-waste-plan.html
[27] http://www.menv.com/blog/prince-georges-county-mes-cut-ribbon-on-new-food-scrap-composting-project-at-western-branch-yard-waste-composting-facility/
[28] http://www.howardcountymd.gov/foodscraps.htm
[29] http://www.takomaparkmd.gov/publicworks/food-waste-collection
[30] http://www.jepsonprairieorganics.com/index.htm
[31] http://cedar-grove.com/
[32] http://www.delawareonline.com/story/news/local/2014/10/21/odor-plagued-compost-plant-ordered-shut/17674401/

cups and clear plastic clamshell containers.[33] While rigid polystyrene is not covered by the Bill's prohibition on expanded polystyrene food service products, it is not currently recycled "using recycling collection programs provided in the County,"[34] and is not compostable. Thus, the use of rigid polystyrene disposable food service ware by the County, County contractors and lessees, and food service businesses would not be permitted under the Bill's requirement that disposable food service ware be compostable or recyclable. This requirement in the Bill as drafted took effect 90 days after the Bill becomes law for County agencies, departments, contractors and lessees[35] and January 1, 2017 for food service businesses. The Committee approved an amendment to the Bill changing the effective date for the County and County contractors and lessees to January 1, 2016.

A number of the issues associated with recycling polystyrene foam, such as foam's low density and vulnerability to contamination, are less problematic with rigid polystyrene, increasing the probability that it may at some point become feasible to recycle in the County. Because of this possibility, and the practical impact of the Bill's requirement that compostable or recyclable disposable food service ware must be used exclusively, effective no later than January 1, 2017, staff does not recommend amending Bill 41-14 to expressly prohibit the use of rigid polystyrene.

5. What is the fiscal and economic impact of the Bill?

A common refrain among the Bill's opponents, and opponents to similar laws elsewhere, is that polystyrene foam is the most cost effective means of packaging certain food products, and that it would be too much of a burden on businesses to switch to alternative packaging. The Executive's fiscal and economic impact statement (FEIS) (see ©103-108) seems to support the assertion that the cost would be substantial. The FEIS includes an estimate that the enactment of Bill 41-14 would result in: 1) Approximately $219,000 in additional annual County expenses (MCPS: $60,000, HHS: $159,000; 2) $75,000 per year plus a one-time $40,000 vehicle expense, or a reduction of 800 HHS inspections per year, depending on which agency took enforcement responsibility, for dedicated enforcement[36]; and 3) $16.2 million in lost profits for County restaurants.

The Office of Legislative Oversight (OLO) reviewed the FEIS, focusing on the estimate of $16.2 million in lost restaurant profits (©109-112). OLO identified four key variables that if changed based on reasonable assumptions could dramatically affect the estimate, with the range of possible estimates going as low as about $2 million. Additionally OLO noted that in several jurisdictions in which polystyrene bans have been imposed, additional costs on businesses can be mitigated through the establishment of purchasing co-ops to bring businesses together and achieve economies of scale. The District of Columbia is considering the establishment of such a co-op which, should Bill 41-14 be enacted, could possibly be expanded to include County food service businesses. When considering implementing its own polystyrene foam ban in 2012, San Jose,

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[33] Not all plastic cups and food containers would be covered; there are plastic cups and clear plastic clamshell containers made from PET (polyethylene terephthalate) and from polypropylene which are already recyclable and recycled in the County recycling program.

[34] http://m.montgomerycountymd.gov/sws/how/plastics.html

[35] *But note that* "a County facility, agency, department, contractor, or lessee may use disposable food service ware already purchased as of the effective date of this Act until the supplies are exhausted or until January 1, 2017, whichever is earlier, including disposable food service ware that the County facility, agency, department, contractor or lessee is obligated to purchase under any contracts in force on the effective date of this Act." Lines 107-113 at ©5-6.

[36] The FEIS indicated that there would be no additional personnel cost if enforcement is complaint driven.

California commissioned a comprehensive economic impact study which includes observations consistent with those of OLO. The San Jose study included a great deal of information about the potential impacts of a ban, which though geographically focused toward the Bay Area in California, is pertinent to the consideration of Bill 41-14. The Introduction and Findings of the study are at ©113-116.[37]

Bill 41-14 also provides for the creation of an "exemption list" by the Executive. This list would include disposable food service ware products for which the Executive determines there is no affordable compostable or recyclable alternative, and would be updated annually. While the term "affordable" is currently not defined in the Bill, it could be defined relative to the purchase cost of a non-compostable, non-recyclable alternative.[38] Additionally, Chapter 48 includes a more general hardship waiver provision at Section 48-3(b), which provides that "the Director may waive any requirement of this Chapter when: (1) practical difficulties, undue hardships or other good cause prevents any person from carrying out this Chapter; and (2) the waiver is not contrary to the spirit and intent of this Chapter and other applicable law, and does not materially impair the public welfare and safety."

6. How would the Bill be enforced?

As drafted, Bill 41-14 does not specify whether its provisions would be enforced on an inspection- or complaint-driven basis. The FEIS indicates a cost for inspection-driven enforcement of either $75,000 per year plus a one-time $40,000 vehicle expense or 800 fewer HHS inspections per year, depending on whether DEP or HHS is the lead enforcement agency. Alternatively, according to the FEIS there would be no additional cost for complaint-driven enforcement. The Bill's enforcement provisions are similar to those in Section 48-49, which provides for enforcement of the Recycling Article. Section 48-3 establishes that the Director of DEP must administer the Chapter. In his testimony on behalf of the Executive, Solid Waste Services Division Chief Dan Locke suggested that enforcement would be on a complaint-driven basis with DEP as the lead agency, which is consistent with the provisions of the Bill and existing law.

Section 48-58, lines 108-112 at ©5-6, includes a provision authorizing the County Attorney or any affected party to seek injunctive relief for repeated violations in a court with jurisdiction. Because the County does not have the authority to create a private cause of action, this Section should be amended to limit the authorization to seek injunctive relief to the County Attorney.

Committee recommendation (3-0): Amend lines 111-112 at ©6 as follows:

(b) The County Attorney [[or any affected party]] may file an action in a court with jurisdiction to enjoin repeated violations of the Section.

[37] The full San Jose Economic Impact Analysis can be found at:
http://www3.sanjoseca.gov/clerk/CommitteeAgenda/TE/20121203/TE20121203_d5attC.pdf

[38] For example, San Francisco's Food Service Waste Reduction Ordinance defines "affordable" as "purchasable for not more than 15 percent more than the non-biodegradable, non-compostable, or non-recyclable alternative(s)."

7. Education and Outreach

The Committee discussed the need for the education of businesses and consumers about the law to ensure compliance, and recommended the inclusion of "education and outreach" provisions.

Committee recommendation (3-0): Require the Executive to conduct an education and outreach campaign about the law before and during implementation of the law (see lines 80-89 at ©4-5).

8. Riemer Committee Amendments.

Councilmember Riemer introduced an amendment (©117) to provide that the exemption for materials used to package raw, uncooked, or butchered meat, fish, poultry, or seafood for off-premises consumption applies to the Bill's requirement for the use of compostable or recyclable disposable food service ware. The Bill, as drafted, exempts these materials from the ban on expanded polystyrene food service products. This amendment would make the Bill internally consistent, as it is inconsistent to allow a food service business to use an expanded polystyrene product for a specific purpose in one section, and then effectively prohibit such use for the same purpose in another section.

Committee recommendation (3-0): Approve Riemer Amendment 1 (see lines 78-79 at ©4).

Councilmember Riemer also introduced an amendment (©118) to change the effective date of the requirement that a County agency, department, contractor or lessee use recyclable or compostable disposable food service ware from 90 days after the Act becomes law to January 1, 2016.

Committee recommendation (3-0): Approve Riemer Amendment 2 (see line 121 at ©6).

Litter survey received since Committee worksession

On January 7, 2015, the Council received a copy of the "2014 Anacostia Watershed Litter Survey" (the Survey), commissioned by Dart Container Corporation and prepared by Environmental Resources Planning, LLC. The Survey is an evaluation of litter collected at 96 sites within the Anacostia Watershed in the District of Columbia and Montgomery and Prince George's Counties. Of the 96 sites evaluated, 12 were in Montgomery County.[39] Nine of the sites in the County were along roadway, and three were "non-roadway" sites located adjacent to indicator streams or trash traps monitored by the Anacostia Watershed Society (AWS). None of the sites were within the waterways. Litter collected in the Survey was classified as "large litter" (four inches or larger) and "small litter" (smaller than four inches). The executive summary, the Montgomery County-specific portions, and list of sites in the Survey are at ©119-141.

There are a number of limitations on the application of the Survey to the County. First, the number of County sites is so small as to make it extremely risky to draw conclusions from the Survey's findings. In a County with an area of 507 square miles, 12 sites with an "optimal size" of 300 feet by 18 feet is simply insufficient to support conclusions about Countywide litter. Also,

[39] 72 of the sites were in the District of Columbia, and 12 were in Prince George's County.

none of the Survey's sites include waterways; they are either roadway or non-roadway *land* area. A particularly troubling aspect of polystyrene foam is its persistence as a marine pollutant. Without any evaluation of the presence of polystyrene foam in the marine environment in the Survey, it is difficult to make a judgment as to the extent of the problem. Finally, some of the County data in the Survey supports the proposition that polystyrene foam litter is a problem in the County. The Survey reflects that 15.6% of the small litter found on non-roadway sites in the County was polystyrene foam packing peanuts, and another 4.4% of the small litter was polystyrene foam food packaging. See ©126. Using that data, 20% of the small litter on non-roadway sites in the County would be directly impacted by the provisions of Bill 41-14.

The Anacostia Watershed Society submitted a letter in response to the Survey, in which it asserts that the Survey has "little relevance to the issues before the council regarding Bill 41-14. . ." AWS believes that the fact that the Survey did not examine litter found *in* streams and rivers limits its relevance, as does the methodology of the Survey. The Survey examines the number of pieces of litter collected at the sites, while AWS asserts that, because of the bulky, lightweight and floatable nature of polystyrene foam, a volume analysis is more important than a count. In contrast to the Survey's counts, the letter references the results at the Nash Run trash trap discussed above.[40]

[40] "The average amount of expanded Polystyrene is 18 percent of the trash removed by the trash trap (28 percent last November and as high as 37 percent in December 2011). Almost all plastic foam items found in the stream are cups, plates, and clamshells related to food and beverage service."

F:\LAW\BILLS\1441 Disposable Food Service Products\Action Memo.Docx

Bill No. 41-14
Concerning: Solid Waste (Trash) – Food Service Products – Packaging Materials – Requirements
Revised: October 30, 2014 Draft No. 6
Introduced: September 9, 2014
Expires: March 9, 2016
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: None
Ch. _____, Laws of Mont. Co. _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmember Riemer, Council Vice President Leventhal and Councilmember Elrich

AN ACT to:

(1) prohibit the use of certain expanded polystyrene food service products by food service businesses;
(2) require the use of compostable or recyclable food service ware by the County, County contractors or lessees, and food service businesses;
(3) prohibit the sale of certain expanded polystyrene food service products and polystyrene loose fill packaging;
(4) provide for enforcement; and
(5) generally amend County law regarding environmentally acceptable food service products and packaging materials.

By adding
Montgomery County Code
Chapter 48, Solid Waste (Trash)
Article VI, Disposable Food Service Products and Packaging Materials
Sections 48-52, 48-53, 48-54, 48-55, 48-56, 48-57, and 48-58

Boldface	*Heading or defined term.*
Underlining	*Added to existing law by original bill.*
[Single boldface brackets]	*Deleted from existing law by original bill.*
Double underlining	*Added by amendment.*
[[Double boldface brackets]]	*Deleted from existing law or the bill by amendment.*
* * *	*Existing law unaffected by bill.*

The County Council for Montgomery County, Maryland approves the following Act:

Sec. 1. Article VI (Sections 48-52, 48-53, 48-54, 48-55, 48-56, 48-57, and 48-58) of Chapter 48 is added as follows:

ARTICLE VI. Disposable Food Service Products and Packaging Materials.

48-52. Definitions.

In this Article, the following terms have the meanings indicated:

ASTM standard means the American Society for Testing and Materials (ASTM) International Standards D6400 or D6868 for biodegradable and compostable plastics.

ASTM standard bioplastic means a plastic like product that meets the ASTM standard.

Compostable means material that will break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device. Compostable disposable food service ware includes ASTM standard bioplastics that are clearly labeled, preferably with a color symbol, such that any compost collector and processor can easily distinguish the compostable ASTM standard bioplastic from non-ASTM standard plastic.

Disposable food service ware means containers, bowls, plates, trays, cartons, cups, lids, straws, forks, spoons, knives, napkins, and other items that are designed for one-time use for beverages, prepared food, or leftovers from meals prepared by a food service business. The term "disposable food service ware" does not include items composed entirely of aluminum.

Expanded polystyrene means blown polystyrene and expanded and extruded foams that are thermoplastic petrochemical materials utilizing a styrene monomer and processed by a number of techniques, including fusion of polymer spheres (expandable bead polystyrene), injection molding, foam molding, and extrusion-blow molding (extruded foam polystyrene).

Expanded polystyrene food service products means food containers, plates, hot and cold beverage cups, meat and vegetable trays, egg cartons, and other products made of expanded polystyrene and used for selling, providing, or serving food that are:

(1) intended by the manufacturer to be used once for eating or drinking; or

(2) generally recognized by the public as items to be discarded after one use.

Food service business means a full-service restaurant, limited-service restaurant, fast food restaurant, cafe, delicatessen, coffee shop, supermarket, grocery store, vending truck or cart, food truck, business or institutional cafeteria, including those operated by or on behalf of County departments and agencies, and other business selling or providing food within the County for consumption on or off the premises.

Polystyrene loose fill packaging means a void-filling packaging product made of expanded polystyrene that is used as packaging fill. Polystyrene loose fill packaging is commonly referred to as packing peanuts.

Recyclable means material that can be sorted, cleansed, and reconstituted in a cost-effective manner using recycling collection programs provided in the County for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating, converting or otherwise thermally destroying solid waste.

48-53. Prohibition on use of expanded polystyrene food service products.

(a) A food service business must not sell or provide food in expanded polystyrene food service products, regardless of where the food will be consumed.

(b) Subsection (a) does not apply to:

(1) food or beverages that were filled and sealed in expanded polystyrene containers outside of the County before a food service business received them; or

(2) materials used to package raw, uncooked, or butchered meat, fish, poultry, or seafood for off- premises consumption.

48-54. Compostable or recyclable disposable food service ware required.

(a) A County facility, agency, or department using disposable food service ware must use compostable or recyclable disposable food service ware unless the Executive determines that there is no suitable affordable compostable or recyclable product available in accordance with Section 48-57.

(b) A County contractor or lessee using disposable food service ware must use compostable or recyclable disposable food service ware unless the Executive determines that there is no suitable affordable compostable or recyclable product available in accordance with Section 48-57.

(c) A food service business selling or providing food or beverages for consumption on or off premises in disposable food service ware must use compostable or recyclable disposable food service ware unless the Executive determines that there is no suitable affordable compostable or recyclable product available in accordance with Section 48-57.[[; provided, that this]] This subsection does not apply to:

(1) prepackaged food or beverages that were filled and sealed outside of the County before a food service business received them; or

(2) materials used to package raw, uncooked, or butchered meat, fish, poultry, or seafood for off-premises consumption.

48-55. Education and outreach; [[Recyclable]] recyclable and compostable food service ware list.

(a) *Education and outreach.* The Executive must conduct an education and outreach campaign before and during implementation of the provisions of this Article. This campaign should include:

(1) informational mailers to and direct contact with affected businesses; and

(2) distribution of information through County internet and web-based resources; and

(3) news releases and news events.

(b) No later than 180 days after the effective date of this Act, the Executive must publish a list of vendors offering affordable compostable or recyclable disposable food service ware products. The Executive must review and update this list annually for at least 5 years after it is first published.

48-56. Prohibition on sale.

A person must not sell or offer for sale in the County:

(a) expanded polystyrene food service products; or

(b) polystyrene loose fill packaging.

48-57. Exemptions.

If the Executive determines that there is no available affordable compostable or recyclable alternative to a disposable food service ware item, this item must be listed on an exemption list and made available to the public. Sections 48-53 and 48-54 do not apply to a disposable food service ware item on the exemption list or for the first 6 months after an item is removed from the list. The Executive must review and update the exemption list annually to determine whether any items should be removed because an affordable compostable or recyclable alternative has become available.

48-58. Enforcement.

(a) Any violation of this Article is a class B civil violation. Each day a violation exists is a separate offense.

(b) The County Attorney [[or any affected party]] may file an action in a court with jurisdiction to enjoin repeated violations of the Section.

Sec. 2. Effective date.

(a) The prohibition on use of expanded polystyrene food service products contained in Section 48-53 and the prohibition on the sale of expanded polystyrene food service products and polystyrene loose fill packaging contained in Section 48-56 take effect on January 1, 2016.

(b) The requirement for a County facility, agency, department, contractor, or lessee to use compostable or recyclable disposable food service ware established by Subsections 48-54 (a) and (b) takes effect [[90 days after this Act becomes law]] on January 1, 2016. Notwithstanding any other provision, a County facility, agency, department, contractor, or lessee may use disposable food service ware already purchased as of the effective date of this Act until the supplies are exhausted or until January 1, 2017, whichever is earlier, including disposable food service ware that the County facility, agency, department, contractor or lessee is obligated to purchase under any contracts in force on the effective date of this Act.

(c) The requirement to use compostable or recyclable disposable food service ware established by Subsection 48-54(c) takes effect on January 1, 2017.

LEGISLATIVE REQUEST REPORT

Bill 41-14

Solid Waste (Trash) – Food Service Products – Packaging Materials – Requirements

DESCRIPTION:	This bill would • Prohibit the use of certain polystyrene foam food service products by food service businesses beginning on January 1, 2016. • Prohibit the sale of foam loose fill packaging (packing peanuts) and bulk foam food service products (i.e., bulk foam cups and plates) beginning on January 1, 2016. • Require the use of compostable or recyclable food service products by the County, and County Contractors and lessees 90 days after the Act becomes law, and by food service businesses beginning on January 1, 2017.
PROBLEM:	Polystyrene foam is a pervasive source of litter, both on land and in marine environments, and has been classified as "reasonably anticipated to be a human carcinogen" by the U.S. Department of Health and Human Services.
GOALS AND OBJECTIVES:	To reduce the negative environmental and human health effects of polystyrene foam by reducing its use in the County.
COORDINATION:	Department of Environmental Protection
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be researched.
SOURCE OF INFORMATION:	Josh Hamlin, Legislative Attorney
APPLICATION WITHIN MUNICIPALITIES:	To be researched.
PENALTIES:	Civil penalties and injunctive relief.

Resolution No.: 17-522
Introduced: July 17, 2012
Adopted: July 31, 2012

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmember Leventhal

SUBJECT: Elimination of the Use of Polystyrene Plates, Cups, and other Foodware in County Government Cafeterias

Background

1. Polystyrene is a petroleum-derived plastic-like material used for packaging. The foam form, known as expanded polystyrene (EPS), is commonly used to make disposable plates, cups, bowls and other items.

2. Approximately 1 million tons of polystyrene plates, cups, and other foodware are disposed of in the United States every year.

3. While potentially recyclable as a #6 plastic, polystyrene is not commonly recycled because of food contamination concerns and because polystyrene's high volume to weight ratio complicates transport of the material. The Environmental Protection Agency estimates that less than one percent of all polystyrene produced in the United States is recycled.

4. Montgomery County's Department of Environmental Protection, Division of Solid Waste, does not recycle polystyrene because of the lack of stable regional markets for the product and because of the complications noted in Paragraph 3.

5. Environmentally friendly alternatives to the use of polystyrene are available, such as: reusable equipment (trays, cups, and silverware) and the use of paper and other products made from recycled content and which are also compostable, biodegradable and/or recyclable.

6. County residents, businesses, and government all need to be good stewards of the environment. County Government should lead by example with environmental initiatives to affirm the County's commitment to reduce its environmental footprint and to show that viable environmentally-friendly options are available and should be pursued whenever possible.

7. The County's Department of General Services has successfully worked with its food service contractors to eliminate the use of polystyrene at its cafeteria sites. These sites are now using recycled paper products for food containers and plates and using clear plastic products for certain wet food items.

Action

The County Council for Montgomery County Maryland approves the following resolution:

The Council supports the elimination of polystyrene foodware in County Government cafeterias and encourages other public and private food service facilities to also consider the elimination of the use of polystyrene foodware.

This is a correct copy of Council action.

Linda M. Lauer

Linda M. Lauer, Clerk of the Council

MONTGOMERY COUNTY COUNCIL
Rockville, Maryland

Councilmember Hans Riemer
At Large

MEMORANDUM

To: Councilmembers
From: Councilmember Hans Riemer
Re: Banning Expanded Polystyrene in Montgomery County
Date: September 2, 2014

Colleagues, on September 9, I am introducing a bill that that would ban the use and sale of certain forms of expanded polystyrene (sometimes called "Styrofoam," although Styrofoam is just one brand of expanded foam) in the County. I ask for your co-sponsorship and support.

With this ban, Montgomery County would join a growing list of other communities that have taken action to ban expanded polystyrene, including Washington DC, San Francisco, Seattle, and New York City.

My bill closely tracks legislation passed in Washington, DC, and signed by Mayor Gray in July, 2014. Our implementation timeline would match Washington's, allowing for a smoother regional effort to raise awareness as well as helping to strengthen the local market for alternative products.

Specifically, the bill includes the following key provisions:

- Prohibits the use of foam food service products by food service businesses beginning on January 1, 2016.
- Prohibits the sale of foam loose fill packaging (packing peanuts) and bulk foam food service products (bulk foam cups and plates) beginning on January 1, 2016.
- Requires the use of compostable or recyclable food service products by the County, County Contractors, and food service businesses beginning on January 1, 2017.

This is important because foam, which is a petroleum-based plastic, is a meaningful share of the litter and pollution found in our watersheds. Over time, discarded foam breaks down into small pieces, but it does not completely dissolve and it is very hard to clean up. When it is ingested by marine life, it causes harm. For human health, the National Research Council has recently "upheld the listing of styrene as 'reasonably anticipated to be a human carcinogen.'"[1]

Fortunately, there are reasonable alternatives to expanded foam.

---

[1] http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=18725

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

September 11, 2014

The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
H-232 The Capitol
Washington, D.C. 20515

The Honorable Kevin McCarthy
Majority Leader
U.S. House of Representatives
H-329 The Capitol
Washington, D.C. 20515

The Honorable Candice S. Miller
Chairman
Committee on House Administration
1309 Longworth House Office Building
Washington, D.C. 20515

Dear Speaker Boehner, Majority Leader McCarthy, and Chairman Miller:

Since our last letter in 2011, we remain concerned about the potential health and environmental effects of your current choice to use polystyrene foam products in the House of Representatives cafeterias. Two recent developments illustrate the hazards posed by these materials and highlight that action to remove them from our cafeterias is long overdue. On July 28, the National Academy of Sciences (NAS) released its Review of the Styrene Assessment in the National Toxicology Programs 12th Report on Carcinogens, strongly supporting the listing of styrene as reasonably anticipated to be a human carcinogen. That same week, Washington, D.C., joined the growing list of over 100 cities that have chosen to ban polystyrene products for health and environmental reasons. It is past time for Congress to do the same.

The NAS report notes that "many people in the United States are exposed" to styrene through "food (from migration of styrene from polymer packaging materials), cigarette smoke,

vehicle exhaust, and other forms of combustion and incineration of styrene polymers."[1] The NAS report also found occupational exposures from the production of styrene. The House of Representatives' continued use of polystyrene containers perpetuates these exposures for those who eat in our cafeterias, those who manufacture the containers we use, and those who live in the areas where our waste is incinerated.

These exposures pose potential health risks. Studies cited by the National Toxicology Program and the NAS found lymphohematopoietic, pancreatic, and esophageal cancers in people with occupational exposures to styrene.[2] Animal studies also showed increased incidence of cancer from both ingestion and inhalation of styrene, and mechanistic analyses "provided convincing evidence that genotoxicity is observed in cells from humans who were exposed to styrene."[3] Based on those studies, the NAS committee concluded that "compelling evidence exists to support a listing of styrene as, at a minimum, *reasonably anticipated to be a human carcinogen.*"[4]

Our use of these dangerous products also harms the waterways in Washington, D.C.. Trash is a significant problem for the health of the Anacostia River, which is why the river has had in place a Total Maximum Daily Load (TMDL) for trash since 2010.[5] According to tracking by the Anacostia Watershed Society, foam makes up about 30% of trash in the river.[6] The city is taking action to reduce polystyrene pollution in the watershed by banning the use of polystyrene food containers and requiring the use of compostable or recyclable food service products. Congress shares responsibility for pollution in Washington and we should take the same action.

For more than three years, House members and staff, as well as constituents and visitors to the Hill who eat in our cafeterias, have needlessly been exposed to this dangerous chemical.

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[1] National Research Council of the National Academies, *Review of the Styrene Assessment in the National Toxicology Program 12th Report on Carcinogens* (July 28, 2014) (online at www.nap.edu/catalog.php?record_id=18725).

[2] *Id.* at 7.

[3] *Id.*

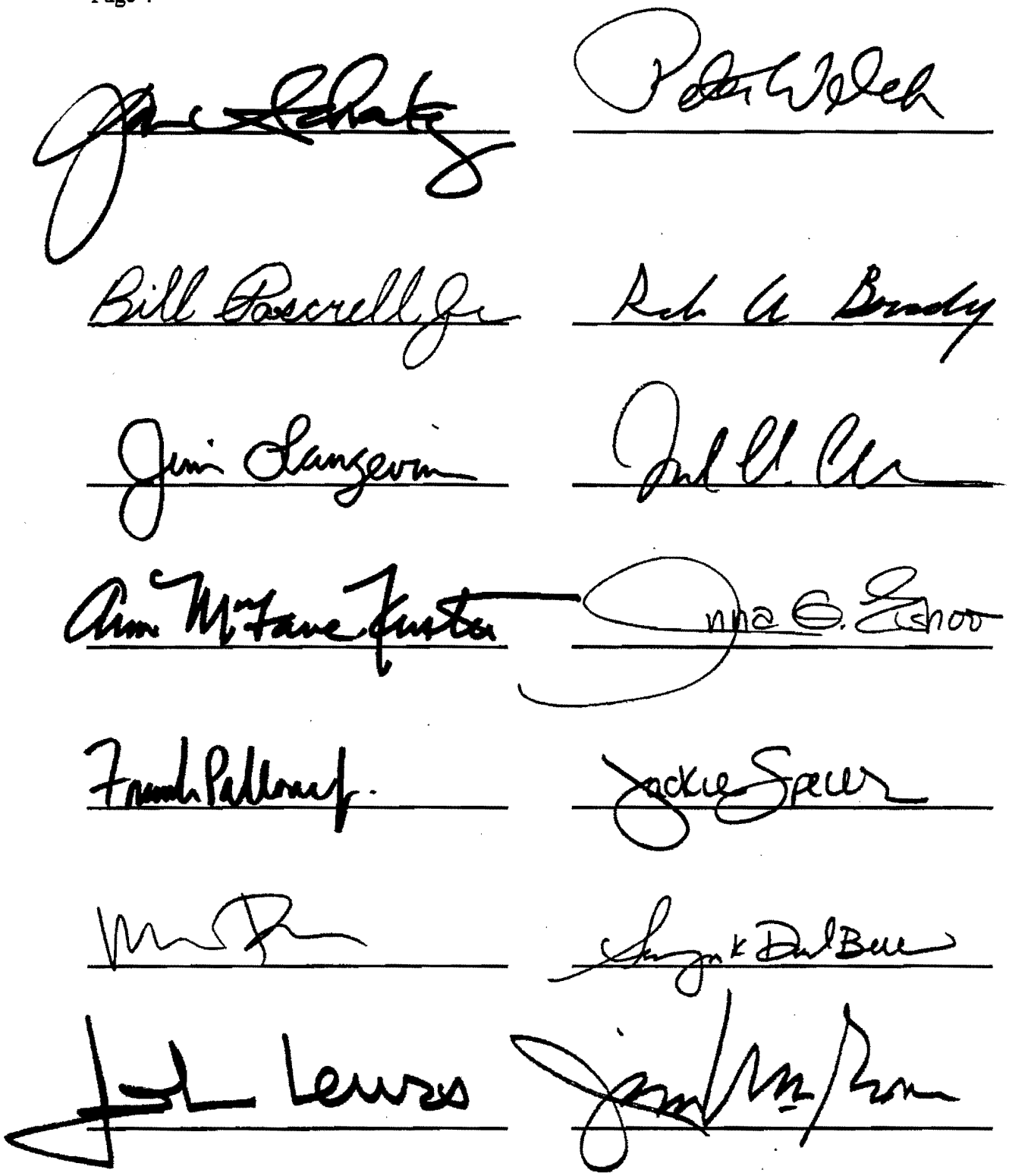
[4] *Id.* at 13. [Italicized in original]

[5] Maryland Department of the Environment and District of Columbia Department of the Environment – Natural Resources Administration, *Total Maximum Daily Loads of Trash for the Anacostia River Watershed, Montgomery and Prince George's Counties, Maryland and the District of Columbia* (Sept. 21, 2010) (online at www.green.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Final_Anacostia_Trash_TMDL.pdf).

[6] Anacostia Watershed Society, *Nash Rush Trash Trap Project* (online ate www.anacostiaws.org/programs/stewardship/monitoring/nash-run-trash-trap).

We have also been contributing to the problem of litter in the District of Columbia. We hope you will reconsider the use of polystyrene foam in our cafeterias.

Sincerely,



Allan Lowenthal

Sam Farr

Elizabeth H. Esty

Mike Quigley

Rush Holt

Chellie Pingree

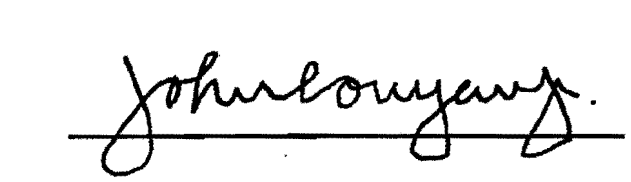
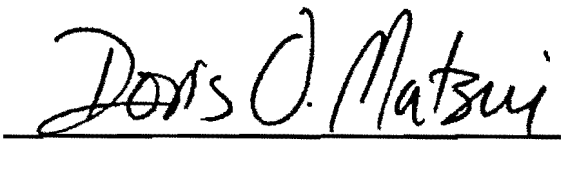
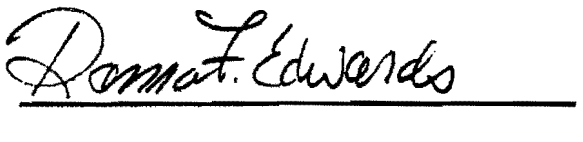
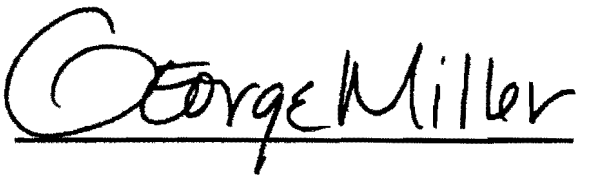
Tim Ryan

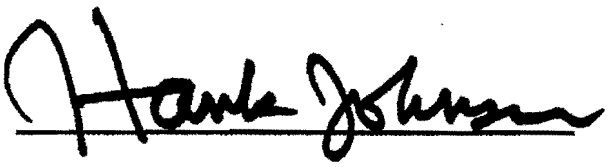
Carol Shea-Porter

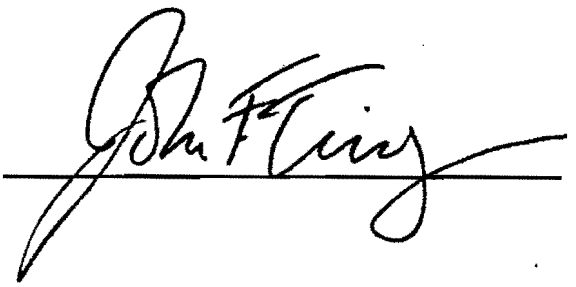
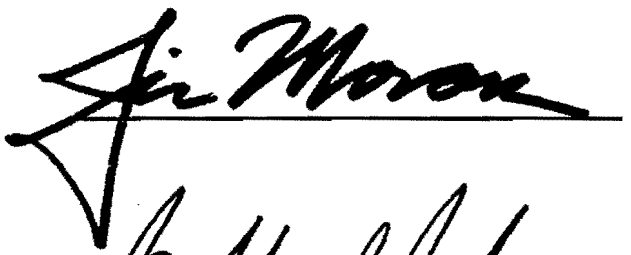
Steve Cohen

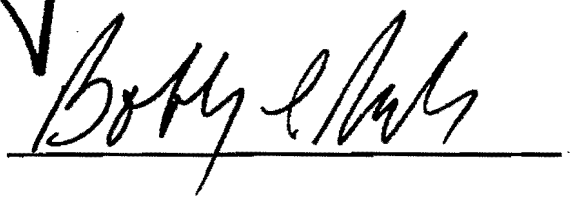
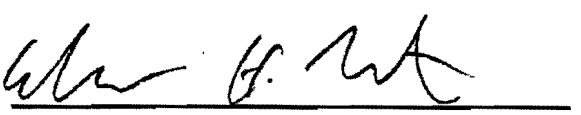
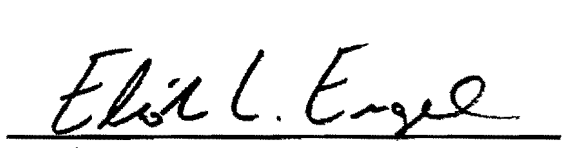
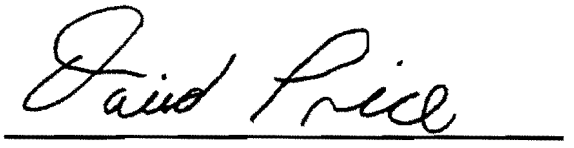
Rosa L. DeLauro

Wm. Lacy Clay



APPLICABILITY OF CHAPTER 48 – SOLID WASTE (TRASH) TO MUNICIPALITIES

Source: Montgomery County Code, Appendix F.
County Laws Applicable to Municipalities

Town of Barnesville	no
Town of Brookville	yes
Chevy Chase Village	no
Chevy Chase View	yes
Chevy Chase Sec. 3	no
Town of Chevy Chase	yes
Chevy Chase Sec. 5	yes
City of Gaithersburg	no
Town of Garrett Park	no
Town of Glen Echo	no
Town of Kensington	yes
Town of Laytonsville	yes
Village of Martin's Addition	no
Village of North Chevy Chase	yes
Town of Poolesville	yes
City of Rockville	no
Town of Somerset	no
City of Takoma Park	yes
Town of Washington Grove	no

Testimony on Behalf of County Executive Isiah Leggett on
Bill 41-14, Solid Waste (Trash) –
Food Service Products – Packaging Requirements

October 14, 2014

Good evening President Rice and Members of the County Council. I am Dan Locke, Chief, Division of Solid Waste Services in the Department of Environmental Protection and I am here to testify on behalf of County Executive Isiah Leggett in support of Bill 41-14. The Bill would amend the County Code governing certain packaging and food service ware used by food service businesses in the County.

The purpose of this bill is to reduce litter and pollution found in our watersheds by requiring food service businesses (including County Departments and Agencies) to stop using polystyrene products and eventually requiring them all to use compostable or recyclable food service ware. The bill also prohibits the sale and use of polystyrene loose fill packaging. The Bill requires the Executive to establish, and update annually, a list of vendors offering affordable and compostable disposable food service ware products.

Enforcement of Bill 41-14 will be accomplished with current Executive Branch Staff, on a complaint driven basis, with the Department of Environmental Protection taking the lead.

Lastly, Bill 41-14 is a very good compliment to ongoing efforts to reduce litter in our waterway as required by our current MS4 permit. We look forward to the positive impact this Bill will have on waterways within the County.

Thank you for the opportunity to testify.

Conservation Montgomery

Statement on Council Bill 41-14

Bill 41-14, Solid Waste (Trash) - Food Service Products Packaging Materials
October 14, 2014
Position: Favorable

Delivered by Caren Madsen, Chair, Board of Directors

Conservation Montgomery supports Bill 41-14 and we thank Councilmembers Riemer, Leventhal and Elrich for leading the way on this legislation.

We support this bill because it aligns with our mission to help improve the quality of life for Montgomery County residents while protecting and conserving the county's natural resources. Too often, however, we see our beautiful parks, streams, creeks and roadways littered with polystyrene food containers which this bill seeks to ban. Working with teenagers who are earning SSL hours, I've picked up more than my fair share of this awful stuff in county parks and out of the Northwest Branch of the Anacostia River.

We assume this bill will have unanimous passage by this Council for all of the reasons spelled out in the legislative packet drafted by your staff. However, I'd like to encourage you to consider an extra step. No bill will ever guide consumers toward behavior that discourages litter.

We encourage you to work with the Executive branch to develop an effective countywide public education campaign to reduce litter that will reach all population segments of the county. Those of us who are baby boomers still remember the Keep America Beautiful campaign launched in the 1960s featuring the actor Iron Eyes Cody – he's typically remembered as the "crying Indian." As an aside, we found out years later that Iron Eyes was actually 100% Italian. But the message he helped deliver remains ingrained in our memory. Without effective public education in our communities, no bill will keep Montgomery clean.

On a final note, I want to applaud the county employees who operate the solid waste recycling facility in Shady Grove. That facility is impressive and is one of the best services county taxpayers have at their disposal. I hope the Council will always keep that service fully funded.

Thank you.

SIERRA CLUB
FOUNDED 1892

Montgomery County Group

Montgomery County Council Hearing

Bill 41-14, Solid Waste (Trash) - Food Service Products - Packaging Materials - Requirements

October 14, 2014

Good evening. I am Brian Ditzler, a resident of Silver Spring, and am here speaking on behalf of the Sierra Club of Montgomery County and its 5000 members in this county. I currently serve on the Sierra Club Executive Committees for our county and for the state chapter.

Our county group strongly supports Bill 41-14 that would restrict the sale and use of expanded polystyrene in food service products and loose fill packaging in Montgomery County.

Expanded polystyrene is one of the most ubiquitous examples of unnecessary, single use, throw away packaging in our country, and it is having a profoundly negative effect on our environment and health.

It is made from petroleum, a non-renewable, heavily polluting commodity. Polystyrene manufacturing requires enormous energy consumption and excessive greenhouse gas emissions. In addition to polluting the air, polystyrene manufacturing creates large amounts of liquid and solid waste. In fact, an EPA report on solid waste named the polystyrene manufacturing process as the fifth largest creator of hazardous waste in the U.S.

Expanded polystyrene is designed to be used for relatively short periods, but because it is not biodegradable, it may take hundreds of years to deteriorate in our environment and landfills. Polystyrene cannot easily be recycled, and is not accepted for recycling in our county.

Because it is very light weight, polystyrene is easily blown into our streets, gutters and storm drains, even when properly disposed of. With its buoyancy, it easily reaches our waterways and eventually our oceans worldwide. Polystyrene food packaging contributes disproportionately to oceanic plastic pollution, with more than 80 percent of this pollution coming from urban litter.

A local example of the pervasive presence of polystyrene was demonstrated when a trash trap along Nash Run in Washington, DC, which flows into the Anacostia River, revealed 22 percent of the average trash volume collected by the trap was polystyrene foam. This was according to a 2010 report by the Anacostia Watershed Society for the DC Department of the Environment.

Because polystyrene is very brittle, it can easily break into small pieces which makes clean up quite difficult, if not impossible. When in small pieces floating in our waterways and oceans, polystyrene is consumed by marine life (including seabirds) because it appears to be food. It actually can cause choking or starvation when ingested, and the toxic chemicals it contains surely aren't good for the health of marine life either.

Polystyrene contains styrene and benzene, suspected carcinogens and neurotoxins that are hazardous to humans. They can leach out into the food and drink that polystyrene packaging contains, especially when heated in a microwave.

For all these reasons, more than 100 cities in the US and Canada (including Washington, DC, New York City, Portland, Seattle, San Francisco, San Jose and Oakland), as well as cities in Europe and Asia, have banned polystyrene food packaging.

Since Bill 41-14 closely tracks legislation already passed in Washington, DC, Montgomery County could join with its neighboring jurisdiction in an effort to raise public awareness of the problems with expanded polystyrene products and why other food service ware is preferable.

Bill 41-14 also would require that compostable or recyclable food service ware be used by the county, its contractors or lessees and food service businesses. That also makes a lot of sense.

Such a requirement likely would increase the use of compostable materials in the county, which would be a positive development for the recycling movement. If our county were to significantly expand its small, model project collecting food waste for recycling (which we would advocate), the addition of compostable food service ware to food waste would increase the total volume that could be collected for composting. This would be another important step forward in expanding green economic development opportunities and building a more sustainable Montgomery County.

After all, food is the largest component of waste (21%) going into landfills and incineration, according to the EPA. Food waste (and compostable food service ware) possibly could be added to the yard trim that already is collected and composted by the county to create more soil supplement for resale.

Let me note before closing that it is unfortunate that many food service businesses will be forced to change the containers they use for food they sell if this bill passes. However, change happens in advanced societies when it turns out there are real problems with the way something was done.

For example, asbestos was widely used in industry and in home products like flooring, insulation, siding, shingles and some appliances that heat up. However, when it was determined asbestos caused real problems, society decided it was prudent to use alternatives. That's what needs to happen now that the many problems with polystyrene have been established.

To summarize, Sierra Club Montgomery County heartily endorses Bill 41-14.

We commend Council Member Reimer for introducing the bill, and thank Council Members Leventhal and Elrich for supporting it.

THE LEAGUE OF WOMEN VOTERS
of Montgomery County, MD, Inc.

Statement on Bill No. 41-14
Montgomery County Council
October 14, 2014

Dear Council President and other Council Members:

Please note the following remarks concerning Bill 41-14, Solid Waste (Trash) Food Service Products Packaging Materials –Requirements, **which the League of Women Voters of Montgomery County strongly supports.**

For many, many years the League of Women Voters nationally has emphasized **REDUCE, REUSE, RECYCLE** as the recommended order of actions for handling materials. The problem that the county council is being asked to address now is that the only one of these that can be safely applied to polystyrene materials is "**reduce**".

> Styrene materials cannot be routinely reused; nor can they be recycled. Disposal in a landfill does not work because they do not degrade completely and their tiny particles can harm the organisms that take them in. Disposal through incineration adds more greenhouse gases (mostly carbon dioxide) to the atmosphere.

On behalf of the League, I note that we are aware of and appreciate that once this bill passes, the county will track how well and how rapidly the replacement compostable materials actually compost.

Meanwhile we urge you to pass Bill No. 41-14 as soon as possible to assist in getting the deleterious polystyrene materials out of the county's waste stream.

Yours truly,

Linna Barnes, President

SURFRIDER FOUNDATION DC CHAPTER

Montgomery County Council, October 14, 2014 Hearing
Testimony IN SUPPORT of Bill 41-14 (the "Bill")

Michael Caruso
D.C. Chapter of the Surfrider Foundation
http://dc.surfrider.org/ -- chair@dc.surfrider.org

I am submitting this testimony on behalf of the D.C. Chapter (the "D.C. Chapter") of the Surfrider Foundation. (I will also be a Montgomery County resident as of this Friday.)

The D.C. Chapter is speaking here in ***support*** of Bill 41-14.

The Surfrider Foundation is a 501(c)(3) non-profit organization dedicated to the protection and enjoyment of oceans, waves, beaches, and rivers. The D.C. Chapter engages almost 100 members in Montgomery County and 400 members in the greater Washington D.C. metro area to both protect and enjoy the Anacostia, Potomac, and all our local rivers and waters. Our chapter members access the Anacostia and Potomac Rivers, and its tributaries, on stand-up paddleboards, kayaks, and even by swimming. The chapter holds several cleanups each year, and we have held several cleanups in Montgomery County over the past few years, where we collect trash along, and from, the Anacostia, Potomac, and its tributaries here in Montgomery County. We find expanded polystyrene foam (EPS) at every cleanup, and it represents a substantial portion of the trash we collect.

As you may know, EPS neither biodegrades[1] nor does Montgomery County recycle the material. In fact, EPS, and plastic more generally, is a global problem that affects all of the world's oceans. Plastics, which include EPS, are one of the most common types of marine litter worldwide.[2] Eliminating the source of this pollutant upstream -- in Montgomery County -- will help both our local and global waterways.

Similar bans are already in place in several parts of the country, including, as you know, D.C., and in Berkeley, California, Marin County, California, Freeport, Maine, Amherst, Massachusetts, Portland, Oregon, and Seattle, Washington. The Surfrider Foundation maintains a list of municipalities that have existing EPS bans. (A link to that list is available here: http://www.surfrider.org/pages/polystyrene-ordinances.)

Further, our Montgomery County members support this bill -- many of you received our chapter's action alert that asked residents to contact their council members about this bill.

We ask that the Montgomery County Council pass Bill 41-14, and help Montgomery County fight this source of non-biodegradable trash from reaching our rivers and waterways, which our members regularly use and enjoy as residents of Montgomery County.

Thank you for your consideration.

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[1] See: http://www.beachapedia.org/Polystyrene
[2] See: http://www.beachapedia.org/Rise_Above_Plastics_Facts_and_Figures

Alice Ferguson Foundation **Clean Land, Safe Water, Healthy Lives**

TRASH FREE POTOMAC WATERSHED
ALICE FERGUSON FOUNDATION

To the Montgomery County Council

Remarks of Clara Elias, Program Manager, Alice Ferguson Foundation

Regarding Bill 41-14, Solid Waste (Trash) Food Service Products - Packaging Materials - Requirements

Tuesday, October 14, 2014

My name is Clara Elias and I am here representing the Alice Ferguson Foundation. Thank you for conducting this important public hearing concerning Bill 41-14, Food Service Products Packaging Material Requirements. I am here today in support of a Polystyrene ban.

The Alice Ferguson Foundation is an environmental education nonprofit based in Maryland. We have been coordinating the Potomac River Watershed Cleanup with our partners in April for the past 26 years. This past April over nearly 15,000 volunteers worked to pull 576,000 pounds of trash from Maryland, Virginia, Pennsylvania, West Virginia, and the District of Columbia. Much of the trash that was picked up was polystyrene, also known as Styrofoam. In fact, the 2008 *Anacostia River Trash Reduction Plan* found that Styrofoam containers and products accounted for 17% of floatable trash pollution and nearly 10% of land based litter found within the Anacostia River Watershed. These Styrofoam products do not biodegrade, instead they accumulate degrading the quality of our environment and our communities. Styrofoam products also break into smaller pieces that are both difficult to remove by our cleanup volunteers, but also commonly mistaken for food by wildlife. Once ingested polystyrene can lead to starvation in wildlife and become incorporated into the food chain where it can disrupt physiological processes as styrene, a component of Styrofoam, is a recognized neurotoxicant.

Polystyrene clamshells, cups, and other packaging are regularly littered.

Styrofoam litter in our streets and communities makes its way downstream into our local waterways where it stays in the environment.

While cleanups are important for keeping the Potomac Watershed free of plastic bags and other litter, we also need to address the source of this pollution. One way we can do this is with policies, such as a polystyrene ban, that are effective at changing behavior and reducing litter. For instance, since bag fees were implemented in the District of Columbia and Montgomery County our Cleanup

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volunteers have recorded over 50% less plastic bags at sites within these jurisdictions. A polystyrene ban has the same potential to drastically reduce the level of trash pollution in the District.

A switch to compostable and recyclable alternatives would be a win for the environment, and doesn't need to be difficult. In a 2013 survey we did of 33 food trucks in DC, we found that roughly 40% were already using compostable materials, such as paper plates and waxed paper boats, with a similar amount relying on expanded polystyrene (Styrofoam). For this reason we believe it will be easier than one may think for businesses to make the switch, especially if businesses are provided with a clear and comprehensive list of alternatives. The Alice Ferguson Foundation hopes that the council will vote in favor of a polystyrene ban and in favor of trash free waterways in Montgomery County.

Thank you.

ROCK CREEK
CONSERVANCY

Bill 41-14—SUPPORT

TESTIMONY OF MATTHEW FLEISCHER, EXECUTIVE DIRECTOR,
ROCK CREEK CONSERVANCY

At the Public Hearing on Bill No. 41-14
Ban of Polystyrene Food Service Ware
Montgomery County Council
October 14, 2014

Rock Creek Conservancy (RCC) is a nonprofit organization founded in 2005 to protect and restore Rock Creek and its waterways, parks, and lands. RCC has mobilized thousands of volunteers to protect Rock Creek's watershed and its 20 major tributaries. Our projects have included tree planting, storm drain marking, invasive plant removal, rain garden installations, and trash cleanups.

Rock Creek is the second largest watershed in Montgomery County, spanning over 168 miles of waterways from its northernmost tributaries near Laytonsville, MD to its outlet into the Potomac River across from Roosevelt Island in DC. The watershed includes Matthew Henson State Park; Rock Creek Regional Park, Rock Creek Stream Valley Park, Rockville's Civic Center Park, and over 40 local parks. Given Rock Creek's expanse through some of the most densely commercial areas in Montgomery County, RCC supports the passage of Bill 41-14 to eliminate the use of expanded polystyrene in food service and packaging facilities.

Scientific evidence demonstrates that polystyrene is a health threat to humans and wildlife, polluting water sources, infiltrating habitats and ecosystems, and being labeled as "reasonably anticipated to be a human carcinogen" by the US Department of Health and Human Services. Rock Creek Conservancy has done its part to minimize this threat by reducing the presence of trash, including polystyrene, in Rock Creek parks and waterways.

Over the past three years, volunteers spent over 25,500 hours pulling trash from streams and woodlands at 75 different locations that border the creek through our annual Rock Creek Extreme Cleanup and other cleanup events. Altogether, 26.5 tons of loose trash and 6618 bags of trash were collected. Despite the efficacy of Montgomery County's plastic bag tax, reducing the number of plastic bags collected in Montgomery County trash cleanups from well over 7,000 in 2011 to 2,360 in 2014, other trash continues to pollute Rock Creek.

ROCK CREEK
CONSERVANCY

Bill 41-14—SUPPORT

Based on regional watershed cleanup records, we know that as much as three quarters of trash removed from waterways is food-related, with 25-40% in the form of expanded polystyrene. Polystyrene enters Rock Creek and its waterways as food ware used at picnics, barbeques and other outdoor eating activities held in Rock Creek or at nearby establishments. Polystyrene products also enter Rock Creek's waterways as litter that has been dropped, thrown from cars, blown from trashcans or trucks, and found in illegal dumpsites. This litter washes into storm drain systems from commercial areas in Bethesda, Rockville, Silver Spring, Wheaton, and a number of strip developments.

As they make their way through storm drains into nearby creeks, polystyrene products break up into smaller and smaller pieces that absorb toxic chemicals and are difficult to pick up. Once in the creeks, polystyrene bits either continue downstream or catch on fallen trees amongst other trash. During rainfall that overflows the creeks, the trash that has dammed then washes downstream to the Potomac River, the region's main source of drinking water. Whether they remain local or are washed out to sea, polystyrene particles persist indefinitely, becoming part of the food chain when eaten by plankton, birds, fish, and eventually by us.

The best solution to this pervasive and toxic pollution is to limit its sources and prevent its usage. This legislation would reduce the unnecessary use of polystyrene foam products, a convenience that has become a menace to our natural landscapes and waterways. Moreover, there are established alternatives to these products. Rock Creek Conservancy strongly supports Bill No. 41-14.

Neighbors of the Northwest Branch
of the Anacostia River

P.O. Box 4314
Silver Spring, MD
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Montgomery County Council, October 14, 2014 Hearing
Testimony IN SUPPORT of Bill 41-14

I am providing this testimony on behalf of the Neighbors of the Northwest Branch. We are a 501(c)(3) nonprofit volunteer watershed organization committed to restoring the health of the 19-mile long stream so this urban treasure can be safely enjoyed by wildlife, our families, and generations to come.

In pursuit of our mission, we maintain a program of action, education, and advocacy. Our members strive to protect the watershed by removing invasive plants and planting native species, supporting reforestation projects and the construction of rain gardens, regularly monitoring sites for changes in water quality, and organizing trash cleanups along the tributary every spring and fall.

As residents of the Anacostia's major tributary, we take very seriously our responsibility to lessen the burden on colleagues downstream who are striving to restore the river's tidal main stem. As you may be aware, both the Anacostia Riverkeeper and the Anacostia Watershed Society have identified polystyrene foam as one of the most common types of trash in the tidal river, the latter reporting that it comprises as much as 20% by volume of the trash they encounter.

During the biannual cleanups of the Neighbors of the Northwest Branch, we routinely remove tires, bottles, paper, and other trash from the stream and the surrounding woods, but polystyrene foam is different. It is much more difficult to retrieve, whether with nets, or with garbage grabbers or by hand, and is thus far more likely to evade us and flow further downstream.

Given the buoyancy of polystyrene foam, what escapes our efforts will likely continue down the river and end up bobbing in the Bay, littering the beach at Ocean City, or endlessly swirling within the ever-growing trash island in the middle of the Atlantic. Whatever its destination, it will pose a health threat to wildlife as they ingest lethal particles mistaking them for food on the water's surface.

And those particles that elude us will be out there a very long time. Indeed, had Captain John Smith gotten "take out" when he was exploring the Anacostia and tossed a Styrofoam food container overboard, bits of his trash might still with us today. Some have estimated that polystyrene foam floating in the relative cool and

darkness of the ocean can last as long as 400 years. The National Oceanic and Atmospheric Administration's Marine Debris Program, perhaps a bit more cautiously, simply states that it will degrade, but will never "go away".

Not all environmental problems have simple, clear-cut solutions, but luckily some do. The Neighbors of the Northwest Branch have seen with our own eyes the positive impact that the County's fee on plastic bags has had on reducing such trash in our beautiful stream and we fully expect that passage of this bill will have an equally beneficial effect.

So we ask that the County Council pass Bill 41-14 and we invite you to join us at our next cleanup on October 25, at Burnt Mills Park.

James Graham, President
307 Lexington Drive
Silver Spring, MD 20901

Testimony Supporting Montgomery County Council Bill 41-14, Banning single-use polystyrene foam containers, and more

October 14, 2014

Daniel C. Smith, Director of Public Policy and Advocacy
Anacostia Watershed Society
4302 Baltimore Avenue
Bladensburg, MD 20710

I am Dan Smith, Director of Policy and Advocacy for the Anacostia Watershed Society (AWS) here to speak in favor of Bill No. 41-14 to ban the use and sale of most single-use polystyrene foam products. AWS is focused on restoring the Anacostia River to fishable and swimmable conditions as mandated by the Clean Water Act of 1972. Our goal is to restore the river by 2025, a challenging, but feasible goal. Styrofoam products are a major scourge of the river. Not only are they unsightly, but they are a threat to wildlife, to ecological systems and to sustainability.

AWS operates a trash trap in Nash Run, a stream that collects runoff and trash from a small area of Maryland and the District and then flows into Kenilworth Aquatic Gardens, the nation's only National Park for water plants. It is from Nash Run that we have over four years of detailed data on the amount and composition of trash from this part of our watershed. Other studies and assessments have been done by county, state and federal agencies to develop plans, strategies and requirements to clean the river, including for the three federal stormwater (MS4) permits issued in the watershed, and for the Anacostia Trash TMDL (only the second river in the country to be found impaired to such a degree by trash to require establishing specific pollution limits).

The Metropolitan Washington Council of Government's 2007 Anacostia Watershed Trash Reduction Strategy, for example, asks jurisdictions to fund trash reduction programs and to "Improve enactment and enforcement of laws to reduce trash."

The attached graph and photo shows the composition of trash collected from the trash trap we custom built and now maintain for the District at Nash Run. Styrofoam comprises more than 30% of the trash at times (by volume). The average amount removed monthly over the past four years is 21% by volume. These findings are the result of a meticulous effort to separate the entire month's trash by categories including plastic bags, beverage containers, polystyrene foam, and other materials.

Because Styrofoam is much lighter by volume than other trash we measure it by the amount of space it takes up, not weight. We consistently find that two of every ten bags of trash are foam cups, plates, and "clamshells." And let me be very clear, this only includes largely intact foam products. As soon as these products begin breaking up, they quickly become fragments that no trash trap can collect. As you can from the photos included with my written testimony, it is impossible to collect the millions of small pieces of this material. Material that we understand will not decompose ever, or at least for four or five hundred years.

The sustainable solution to managing this waste stream and others -- since the manufacturers, distributors, and end users of Styrofoam are unwilling to take responsibility for its secure reuse or safe disposal -- is to ban the material outright. The disposal responsibility should NOT fall to

Montgomery County taxpayers and agencies, or to nonprofits, volunteers, workforce development teams, or to generations yet unborn. We are all suffering from this pollution. And it's a costly, but losing effort.

No amount of trash traps or stream cleanups will keep our Anacostia, or Rock Creek, or Potomac or Chesapeake Bay from the scourge of Styrofoam pollution. These efforts are very important, but they are stop gap or transitional at best. We need a cultural shift, a change in behavior. You have the power to aid that transition in major way with this legislation.

The measure we are considering today is a long overdue and not unexpected action for a well-documented and long-festering problem. In addition to the authorities already mentioned, trash reduction of this kind is of keen interest to the National Park Service, NOAA, EPA, MDE, DEP, DDOE and DoE.

The Bag Bill has been a fantastic example of behavior change. It's amazing how a nickel has caught the attention of so many people! The reduction of plastic bags at the source has been over 50%. The study released in January by DDOE reports that the District's Bag Fee Law is working for both residents and businesses. And we are here to say that it is also working for the River.

We have conducted our annual Earth Day Clean up with partners for almost 20 years. The trash we are finding today is refuse of a "convenient lifestyle," from food and drink made available everywhere and anytime. I'm certain that you will hear from the packaging manufacturers and sellers that this ban is an affront to their livelihood. But I am here today speaking for the Anacostia River which has taken way too much abuse, for far too long, and whose waters long for clarity and sustainability. "Free me from Styrofoam," is the call we hear from the River. "Stop clogging my arteries and tributaries with trash."

In conclusion, the Anacostia Watershed Society supports Bill 41-14 as an important way to reduce the negative environmental and human health effects of polystyrene foam by reducing its use in the County. Banning foam and requiring recyclable or compostable alternatives will have a significant positive effect on our streams and neighborhoods. I hope Montgomery County will join Washington, DC, in leading the region in preventing trash pollution at its source.

For 25 years now, AWS has worked to secure a strong, sustainable, smart, and successful restoration of the river for people, wildlife and the enhancement of nearby communities. Montgomery County and its residents have and will continue to be essential partners in efforts to clean up the Anacostia River and its tributaries. Our work is bearing fruit. Our river is increasingly seen as an urban oasis for recreation and a desirable location for living and working.

Thank you. And thank you for the opportunity to testify today.

The Anacostia Watershed Society is a member of the Maryland Trash Free Alliance and also supports the work and testimony of our many collaborators and allies including the Institute for Local Self Reliance, DC Environmental Network, Sierra Club, Neighbors of the Northwest Branch, Alice Ferguson Foundation, and the many other advocates for clean water and healthy communities who serve Anacostia, Rock Creek and Potomac Communities.

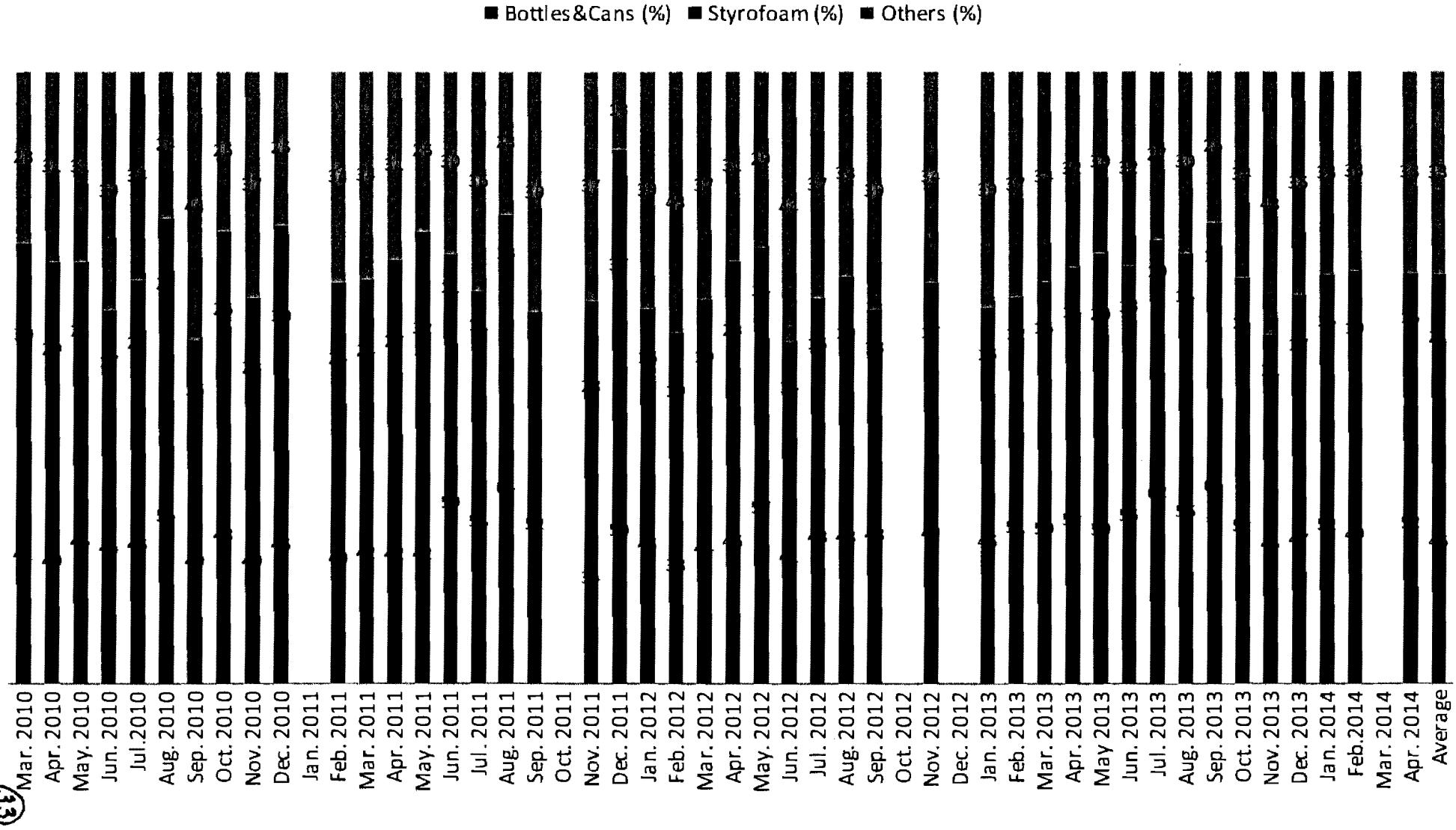
Attachments.

Approximately 21% of Trash by Volume is Styrofoam

ANACOSTIA WATERSHED SOCIETY

Trash Characterization by Volume

In the Nash Run watershed of the Anacostia



Small Particles of Styrofoam

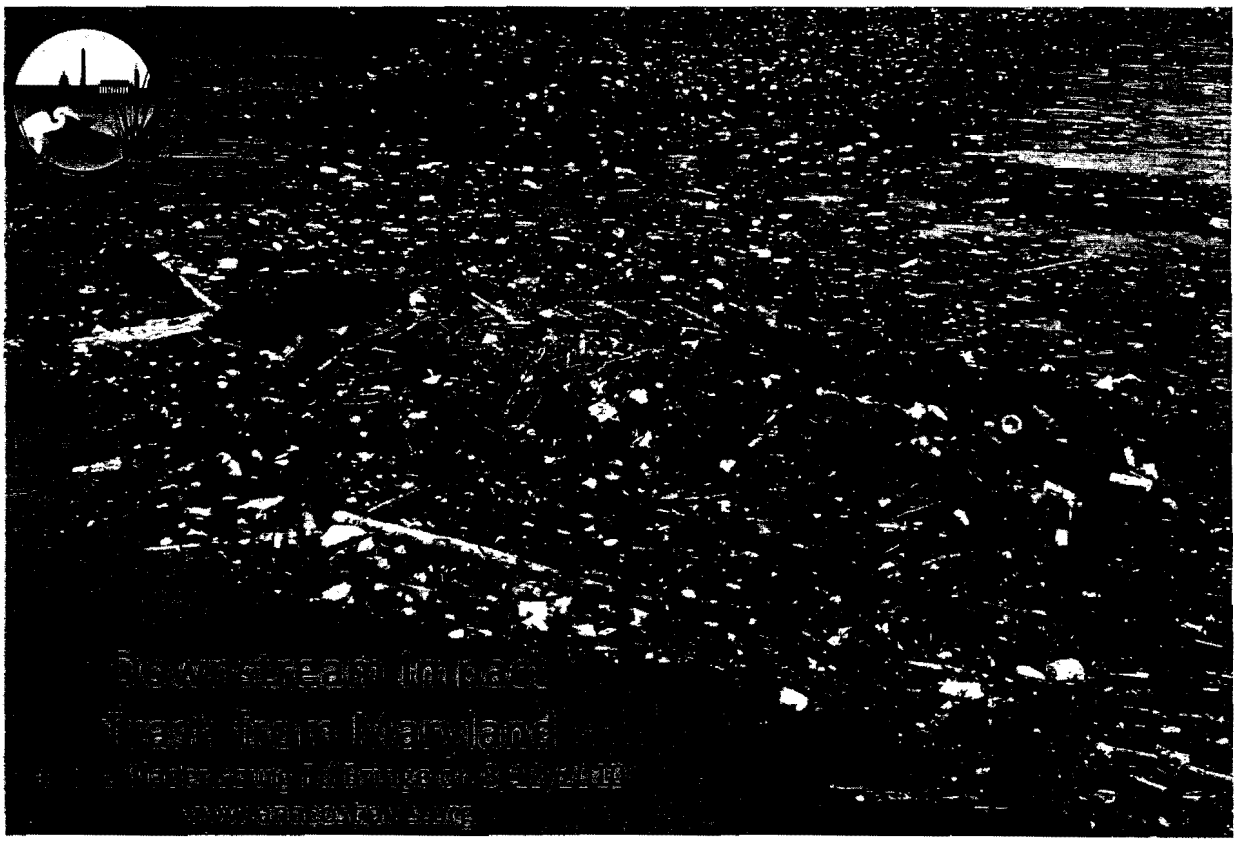
It is impossible to pick up all these small particles of Styrofoam

ANACOSTIA WATERSHED SOCIETY
www.anacostiaws.org

Trash captured in May 2012 by Nash Run Trash Trap was presented by category.

Downstream Impact in D.C.

on August 12, 2010



Sugarloaf Citizens' Association

Protecting Our Rural Legacy

Linden Farm, 20900 Martinsburg Rd., PO Box 218, Dickerson, MD 20842 • Tel. 301-349-4889
www.SugarloafCitizens.org

Good Evening. My name is Beth Daly and I am testifying on behalf of the Sugarloaf Citizens Association (Sugarloaf) and Montgomery Countryside Alliance (MCA). Both Sugarloaf and MCA work to preserve the agricultural tradition and environmental health in upper Montgomery County.

With that mission in mind, I am here today to register our support of Bill 41-14 introduced by Councilmember Riemer and co-sponsored by Councilmembers Elrich and Leventhal. By prohibiting the use of polystyrene food service products –commonly known as "Styrofoam" –and requiring the use of compostable or recyclable food service ware, we are taking an important step towards a healthier and less polluted Montgomery County. Styrofoam does not break down and contributes to litter in our waterways and green spaces. Additionally, styrene—a main ingredient in Styrofoam—is a known carcinogen. Our County's incinerator is located in Dickerson--the heart of the Agricultural Reserve. In calendar year 2012, approximately 9,000 tons of styrene products were combusted at the County's Resource Recovery Facility. While there is no data to breakout the amount of styrofoam that is burned, it is safe to say that those who live and work in the shadows of the incinerator would be pleased to have less pollutants in the air.

We appreciate your consideration of our views and thank you for serving our County.

October 14, 2014

Testimony Supporting a Ban On Polystyrene Containers in Montgomery County (Bill 41-14)

Councilmember Riemer's bill to ban styrofoam containers, cups and packing material and replace them with compostable or recyclable materials would significantly improve the environment and health of people in Montgomery County. Montgomery Co. should follow the lead of the District of Columbia, NY City, San Francisco, San Jose, and Seattle by passing this bill.

A. Styrofoam is bad for the environment:

1. It creates a huge amount of waste and pollution.
Polystyrene products are made with petroleum, a non-sustainable and heavily polluting resource. *Styrofoam is not biodegradable and cannot be recycled. It takes 500 years to decompose. According to the California Integrated Waste Management Board, its environmental impacts were second highest, behind aluminum.*

A 1986 EPA report on solid waste named the polystyrene manufacturing process as the fifth largest creator of hazardous waste in the United States. This is because of the product manufacturing process, a the use and disposal of the products, energy consumption, greenhouse gas effect, and total environmental effect.

2. It litters the environment, especially waterways
Studies by the D.C. District Department of the Environment, the Montgomery County Department of the Environment, and the Maryland Department of the Environment confirm that styrofoam is a significant source of litter, especially in watersheds. Because it is lightweight, it goes through gutters and stormdrains into waterways. The farther it travels, the smaller the pieces get, which makes it hard to clean up. Styrofoam contributes 22% of the trash in an Anacostia River tributary, according to the D.C. Department of the Environment. It contributes 9000 tons to the waste stream of Montgomery County.

The United Nations Environment Program estimated in 2006 that every square mile of ocean has 46,000 pieces of floating plastic in it. When it gets into the watersheds, it is ingested by marine life, causing harm to it.

3. Styrofoam contributes to climate change. *Styrofoam is made with* .hydrochlorofluorocarbons (HCFC), which, as a greenhouse gas, *has 1000 times greater effect on global warming than carbon dioxide.*

B. Styrofoam is bad for people's health:

1. Styrofoam releases toxic gasses when burned. It releases two toxic gases. One is benzene, a highly carcinogenic substance. The other is styrene, which is highly toxic and is readily absorbed through the skin, respiratory system and GI track and nervous system, and can cause deep unconsciousness and death. The vapor can damage the eyes and mucous membranes. Styrene is a neurotoxin that attacks the central and peripheral nervous systems. The accumulation of these highly fat-soluble materials in the fat-rich tissues of the brain, spinal cord, and peripheral nerves is correlated with acute or chronic functional impairment of the nervous system. Styrofoam has been found in 100% of human's fat tissue.

It also releases a great deal of soot when burned. This is bad for the respiratory system and increases asthma and allergies.

2. Styrofoam leaches the toxin styrene into warm food and drinks:
Styrofoam containers leach styrene into warm food and drinks, alcohol, oily food, and acidic food. Thus, we should avoid drinking tea with lemon, coffee with dairy cream, fruit juices, alcoholic beverages and wine from styrofoam cups. Red wine instantly dissolves styrofoam. Food containing vitamin A decomposes when heated in styrofoam containers. It is not safe to microwave in styrofoam because it leaches toxins into the food.

C. Chamber of Commerce and Restaurant Associations: Take Note! There is no reason to use styrofoam any more. *There are competitively priced alternatives, which are recyclable and compostable. Containers, cups and packing peanuts can all be made out of recyclable and compostable materials for only slightly more.*

"Why Biodegradable Take-Out Boxes and Cups are the Way to Go," Great Allegheny Passage Sustainable Business Network, April 13, 2011

"While these alternatives do cost more than the traditional Styrofoam and paper cups and containers, their additional cost is relatively marginal over the course of a business year. Whereas Styrofoam cups cost $25 per 1000, biodegradable cups can cost as little as $100 for 1000. This means that if your business uses 1000 disposable cups a year, the additional cost would be **only $75 per year**, which is the amount of money you might make in a single business day. With take-out containers, the additional costs for biodegradables can be **less than $140 a year**, if your business goes through 1000 of them in that time span."

Companies like Starbucks, McDonalds, and Chipotle have already moved away from styrofoam. This will significantly reduce the amount of styrofoam and attract environmentally oriented customers. Montgomery County should follow the lead of these enlightened companies.

Molly Hauck
4004 Dresden St.
Kensington, MD. 20895-3812

October 14, 2014 Testimony
by Margot Bloch
to the Montgomery County Council
in support of
Bill 41-14, Solid Wastes - Food Service Products - Packaging Materials - Requirements

Good evening. My name is Margot Bloch. I am a 9th grade student at Montgomery Blair High School and have been a member of the Young Activist Club for 7 years. Thank you for the opportunity to testify tonight.

I am here tonight to testify in support of Bill 41-14 that would ban expanded polystyrene food service products by food service businesses.

Because I am a student and I have been working on this issue for so long, this is very important to me and also to our young activist club as a whole. And this is why I am here to testify, to discuss reasons and facts supporting the passing of this bill.

There are many problems with polystyrene in our school and in our community. In is a huge health concern for everyone- it is made from styrene which is a known neurotoxicant and a reasonably anticipated human carcinogen. We should most definitely not be using it to serve our food and drinks on.

Another big problem with using PS is pollution. First of all it is made from fossil fuels, and drilling and use causes pollution locally and globally with climate change. The Dickerson incinerator burns our trash and so chemicals go in to the air we breathe.

Also, Polystyrene is not just Styrofoam, the expanded foam form. It is all number plastics with a number 6 resin code. This includes many different hard plastics which are also very commonly used for food service ware. Some examples are red Solo cups, clear plastic clamshells, clear cups. We should not be using any of it to eat or drink.

I am glad that the bill prohibits the sale of styrofoam products at stores and I support getting rid of the rest of the polystyrene plates, bowls and silverware in our school cafeterias. It would be great to get the YAC pilot tray-washing project at Piney Branch Elementary School to happen. Right now we still don't have the go ahead to do the dishwasher project even though we've raised $10,000 to pay for everything for a year long pilot. YAC's work on this has led to MCPS changing the styrofoam trays to paperboard trays-- but, it is still trash because the paper trays cannot be recycled due to food contamination and there is no composting yet available. Because of all this, we should still do just a pilot project of reusable trays and see it that not only gets rid of most of the trash but also saves the school system money as we have calculated.

Please expand the bill to cover all types of #6 polystyrene used for foodservice ware, and add a pilot dishwasher project for reusables in the school.
Thank you for letting me speak and we appreciate the leadership this county is taking to join many other places in banning the use of toxic polystyrene food service ware.

Madame Walker Theatre Center

Our heroine, a ladybug, is an orphan who lives with Mr. & Mrs. Roaché. He gives her advice: "We all have to adapt to survive."

Mrs. Roaché gives advice to Aunt Beatrice, who has the "Bug Blues" because of husbug, Buddy.

October 14, 2014 Testimony
by Anna Brookes, on behalf of the Young Activist Club
to the Montgomery County Council
in support of
Bill 41-14, Solid Wastes - Food Service Products - Packaging Materials - Requirements

Good evening. My name is Anna Brookes and I am speaking on behalf of the Young Activist Club in Takoma Park.

Thank you for the opportunity to testify.

I'm here to talk about the proposed bill banning polystyrene foam for use as packaging or food service in businesses Montgomery county.

Since 2008, the young activist club has been working to raise awareness about the problems with polystyrene in our schools and in our community.

Polystyrene is, first off, bad for the environment. It's not recyclable, not compostable, and never biodegrades, and usually ends up polluting our oceans or waterways. But polystyrene is also bad for people's health. It's made from a chemical called styrene, which the FDA recognizes as a known neurotoxicant and a reasonably anticipated human carcinogen- meaning it causes brain damage and likely causes cancer.

Back in 2012, you passed Resolution No. 17-522, which supported the elimination of polystyrene foodware in County government cafeterias. Thank you!

I am here tonight to urge you to pass Bill 41-14 that would ban expanded polystyrene food service products by food service businesses.

We like that this current bill:

- Prohibits the sale of styrofoam products at stores
- Covers institutional cafeterias, including those operated by County agencies

As you may know, we have proposed a pilot tray-washing project at Piney Branch Elementary School. Unfortunately, Superintendent Starr and the county school board won't let us do the dishwasher project even though we've raised $10,000 to cover all costs. But due to our efforts, MCPS has decided to replace all styrofoam trays with these paperboard trays. However, we think reusable trays are still worthy of study and could ultimately save the school system money. The paper trays cannot be recycled due to food contamination and there is no composting yet available. In addition, school cafeterias are still using styrofoam for bowls and cups and polystyrene for the forks and spoons, which are wastefully individually wrapped in plastic.

We request that you:

- Expand the bill to cover all types of polystyrene used for foodservice ware
- Ensure this bill covers MCPS and all polystyrene used in the school system
- Make sure the prohibition on sale of polystyrene products stays in the bill
- Polystyrene is not just Styrofoam, the expanded foam form. It is all number 6 type plastics. These are examples: red Solo cups, clear plastic clamshells, clear cups.
- Consider an amendment requiring MCPS to pilot a tray washing project to assess costs between single-use trays and durable trays
- Consider separate legislation to develop composting systems

There are thousands of alternative products to polystyrene and dozens of cities that have banned polystyrene. In Takoma Park, more than 37 businesses have taken our No-Polystyrene Pledge, and just last night at a hearing about a similar bill being passed in Takoma Park, the chair of the Takoma Langley-Crossraods buisness associatio said she had talked to al the biusnesses there and that almost all of them were completley supportive of the act, even though they would have to stop using cheap Styrofoam.

When lead in gasoline and paint was found to be toxic, it was banned and alternatives became available. The same is already happening with polystyrene. Cost should not be an issue. Thank you for your leadership in protecting my health and the health of all members of our county.

Thank you.

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Hi! I'm Leo Blain, and I'm also here on behalf of the Young Activists Club. First off, I would like to thank you so much for having us here tonight. I would like to urge you to pass bill 41-14 that will prohibit the use of expanded polystyrene foodware in businesses and schools. As Anna already said, polystyrene is not good for your health. It is a reasonably anticipated human carcinogen, so it is suspected to cause cancer, and it is a known neurotoxicant, so it is especially important to keep it out of our schools where it can damage young students developing brains. Aside from being harmful to humans, it is also harmful to the environment; the only way to get rid of it is to burn it. The cardboard trays that have been instated in Montgomery County cafeterias are definitely a step up from polystyrene, but still cannot be recycled due to food contamination, and cannot be composted, as Montgomery County does not have a compost system in place. Bill 41-14 will ban expanded polystyrene, which is great, however we urge you to consider expanding the bill to cover all types of polystyrene used for food service ware, such as solocups and plastic clamshells. One other part of the bill we would like to revise is the part that states "Notwithstanding any other provision, a county facility, agency, department, contractor, or lessee may use disposable food service ware already purchased as of the effective date of this act until the supplies are exhausted, or until January 1, 2017." This may allow people to purchase polystyrene up to January 1st of 2017. We would like to urge you to change the bill so that people are not allowed to purchase polystyrene up to this point, as allowing people to purchase it would cause continual harm to people and the environment. Once again thank you very much.

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October 14, 2014 Testimony
by Nadine Bloch
to the Montgomery County Council
in support of
Bill 41-14, Solid Wastes - Food Service Products - Packaging Materials - Requirements

Good evening. Thank you for the opportunity to testify. I am here tonight in support of Bill 41-14 that would ban expanded polystyrene food service products by food service businesses.

As a parent, an environmentalist, and someone who cares deeply about our local community and the global environment, I am here to speak out in support of healthy products, healthy children, and healthy communities. We know that there are corporations and individuals who are more concerned with making money than protecting people and our planet; I would like to remind the Council that there is a long and proud tradition of banning products that have been found to be poisonous and toxic in spite of the seeming financial incentives to continue their use-- including ozone depleting chemicals, cigarettes, lead in paint and gasoline, DDT and other pesticides, just to name a few.

All #6 plastics have styrene as their base monomer, and therefore all are implicated as a known neurotoxicant and now reasonably anticipated human carcinogen. (http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=18725) Plastic leachate of endocrine disruptors is also implicated in obesity and learning disabilities in children. (http://www.nytimes.com/2013/01/20/opinion/sunday/kristof-warnings-from-a-flabby-mouse.html?ref=opinion&_r=1&) Disparate impacts of this toxicity will be born by those who can least afford it, as the school lunch program serves predominantly low income youth of color. Production facilities, as well as incinerators, often pollute surrounding areas and result in negative health impacts for workers and local ecology. All of this will cost us, the non-corporate beneficiaries of plastic production, a huge amount in externalized health care and special educational fees. Unfortunately the way our accounting is set up it is difficult to quantify the externalized costs of continuing to use toxic PS; if it were factored into the County's calculations it would be clearly more economical in the long run to support using healthy alternatives.

Congratulations to the sponsors of this bill for following up on the 2012 Resolution No. 17-522, which supported the elimination of polystyrene food ware in County government cafeterias.
It is smart to include a prohibition on the sale of styrofoam products , and that it covers all institutional cafeterias, so please keep these critical pieces in the final bill.

As well, to make the Bill most effective at keeping our people and communities healthy, please:

- Expand the bill to cover all types of polystyrene used for foodservice ware
- Set a swift timeline for MCPS to remove all polystyrene from foodservice in the school system
- Consider an amendment requiring MCPS to pilot a tray washing project to assess costs between single-use trays and durable trays (call on the Takoma Park YAC to use their $10k to support this pilot.)
- Consider separate legislation to develop composting systems, a vocational /technical program to support this in the County, and develop a revenue stream.

I have personally talked with many businesses in my town who are in support of this ban, and who have already transitioned from toxic PS to alternatives, or who are in the process of doing so. Almost 40 businesses in Takoma Park have signed onto the PS Free Pledge of the YAC; and Crossroads Community association has support from its businesses and vendors as well.

There are thousands of alternative products to polystyrene and dozens of municipalities that have already banned polystyrene and it is encouraging that MoCo is potentially following on this path.

Thank you for your leadership on this issue, please support an expanded PS Ban for MoCo.

Montgomery Council Hearing on
Bill 41-14, Solid Wastes - Food Service Products - Packaging Materials - Requirements

Testimony Supporting

October 14th, 2014

By Brenda Platt
Co-Director, Institute for Local Self-Reliance
2001 S St., NW, Suite 570, Washington, DC 20009
bplatt@ilsr.org • www.ilsr.org

Thank you for the opportunity to testify today and for your support in making Montgomery County a more sustainable and livable community. My name is Brenda Platt and I am the co-director of the Washington, DC-based nonprofit, the Institute for Local Self-Reliance (ILSR). I have worked 28 years on solid waste issues and authored numerous reports on waste incineration, reuse, recycling, composting, and zero waste planning. I currently head up ILSR's Sustainable Plastics and Composting Makes ene Projects, co-chair the Sustainable Biomaterials Collaborative, and co-lead a Montgomery-County-based Young Activist Club that is focused on getting polystyrene out of their school and community. I am an expert on polystyrene, compostable foodservice ware, and composting. I have also been a Montgomery County resident since 1989.

I am testifying today to support **Bill 41-14**, which restricts the use of expanded polystyrene foodservice products. I have identified and documented more than two dozen similar laws passed in other jurisdictions, and helped to pass the District's law earlier this year.

There are many valid reasons to restrict polystyrene foodservice products. As a mother, the top one for me is public health.

Health Implications: Polystyrene is made from the styrene monomer, which is a known neurotoxicant and was elevated in 2011 from being a possible human carcinogen to being reasonably anticipated to be a human carcinogen.[1] This means there is a huge body of evidence now linking styrene to human cancers. No polymerization process is 100% efficient, so styrene remains in polystyrene and has been found in 100% of adipose (fatty tissue) samples, meaning it is widespread and prevalent in all of us. It even crosses the placenta barrier. According to a 2000 World Health Organization report, "The ability of styrene monomer to migrate from polystyrene packaging to food has been reported in a number of publications and probably accounts for the greatest contamination of foods by styrene monomer."[2] You may hear that polystyrene is safe because it's FDA-approved and regulated. Sadly, we know that the science and history of the regulatory process proves otherwise (consider how long it took to ban lead in paint and gasoline, or the current battle to ban BPA, despite hundreds of peer-reviewed research studies). Products approved in the marketplace today may well likely be banned tomorrow as policy keeps pace with science.

Polystyrene Is Among the Most Toxic Plastics to Make: The process of making plastics consumes a mindboggling 244 million tons of toxic chemicals. In addition to styrene, polystyrene is made from benzene, another carcinogen. There is now a new tool, the Plastics Scorecard, that has

[1] See the US Department of Health and Human Services, *12th Report on Carcinogens* (2011), which is a congressionally mandated, science-based, public health document that is prepared for the HHS Secretary by the National Toxicology Program. The report identifies agents, substances, mixtures, and exposure circumstances that are *known or reasonably anticipated* to cause cancer in humans. Available online at: http://ntp.niehs.nih.gov/?objectid=03C9AF75-E1BF-FF40-DBA9EC0928DF8B15

[2] See Styrene Chapter, Air Quality Guidelines-2nd Edition, WHO Regional Office for Europe, Copenhagen, Denmark, 2000.

been designed to evaluate the chemical footprints of plastics.[3] Five of the ten common plastics evaluated received failing scores – zero out of a possible 100 points – due to the fact that toxic chemicals were used at every single stage of their production. But only one of these – polystyrene – is commonly used for serve food. See attached chart, Addendum A. This underscores the rationale for targeting polystyrene above other plastics used for foodservice ware.

In the absence of any action at the federal level, dozens of cities and counties have passed laws to restrict the use of polystyrene in foodservice ware. Many of these laws point to the human health impacts to workers and consumers. Montgomery County's bill, if passed, would be the first comprehensive law in Maryland, and would become a model for other cities to emulate.

Prohibit Sale of Polystyrene Foodservice Products: Thank you for going beyond the District's bill by prohibiting the sale of polystyrene packaging peanuts and the sale of expanded polystyrene foodservice ware products. Allowing grocery stores and packaging vendors to sell polystyrene foodservice products for home or community use would be a loophole that will weaken the effectiveness of the law. West Hollywood's law is one that also prohibits the sale of polystyrene food ware, not just prepared food packaged in it. Sunnyvale, CA's recently passed law (November 2013), bans all commercial sales of expanded polystyrene food containers beginning April 22, 2015, a year later than its ban applicable to food service establishments. When the American Chemistry Council testified at the DC City Council's hearing, they pointed out the loophole in the District's law. Glad you are closing it.

Strengthen Bill by Targeting All Polystyrene for Foodservice Ware: If anything, you could strengthen the proposed bill by targeting all types of polystyrene used to serve food and beverages. All types of polystyrene, #6 resin code, are made from styrene and benzene and pose health dangers. Cups, take-out containers, and plastic cutlery are frequently made from a clear, white or colored non-foam rigid type of polystyrene. West Hollywood (CA), The City of South San Francisco (CA), the City of Hermosa Beach (CA), and Brookline (MA) have laws that go beyond expanded polystyrene to cover the rigid form as well. Because of the health concerns of eating off a product derived from a material anticipated to cause human cancers, all forms of polystyrene for foodservice should be banned. Consider that styrene is directly soluble in alcohol and that the popular blue, red, and yellow polystyrene cups (made by Solo Cup) are the standard choice for serving beer at parties.

A Word about Encouraging Use of Reusable, Recyclable, or Compostable Foodservice Ware: Glad that this bill, like DC's, requires single-use foodservice ware to be recyclable or compostable starting January 2017. Other cities have done this too. Seattle passed its foodservice packaging restrictions in two phases. Phase I restricted use of polystyrene. Phase 2, implemented 18 months later, required foodservice packaging to be reusable, recyclable, or compostable.[4] Virtually all foodservice establishments now use compostable ware for take-out prepared foods and even food trucks have bins to collect food waste and compostable ware. See photos in Addendum B. The private compost facility serving the Seattle region – Cedar Grove Compost – is one of the most comprehensive information sources on compostable products, and works directly with the City to label products effectively and to educate citizens.[5] Dick Lily with the Seattle Public Utilities credits the biobased products industry for enabling his City's packaging requirements to work, pointing to

[3] http://www.biznqo.org/static/ee_images/uploads/plastics/executive_summary_plastics_scorecard.pdf

[4] For information on Seattle's food service packaging requirements, visit: http://www.seattle.gov/util/forbusinesses/solidwaste/foodyardbusinesses/commercial/foodpackagingrequirements/. Ordinance 123307, which took effect June 19, 2010, permits Seattle Public Utilities to issue director's rules for temporary waivers to the food service ware and packaging requirements set out two years ago in Ordinance 122751.

[5] See Cedar Grove's web site at http://cedar-grove.com/commercial/accepted-items/

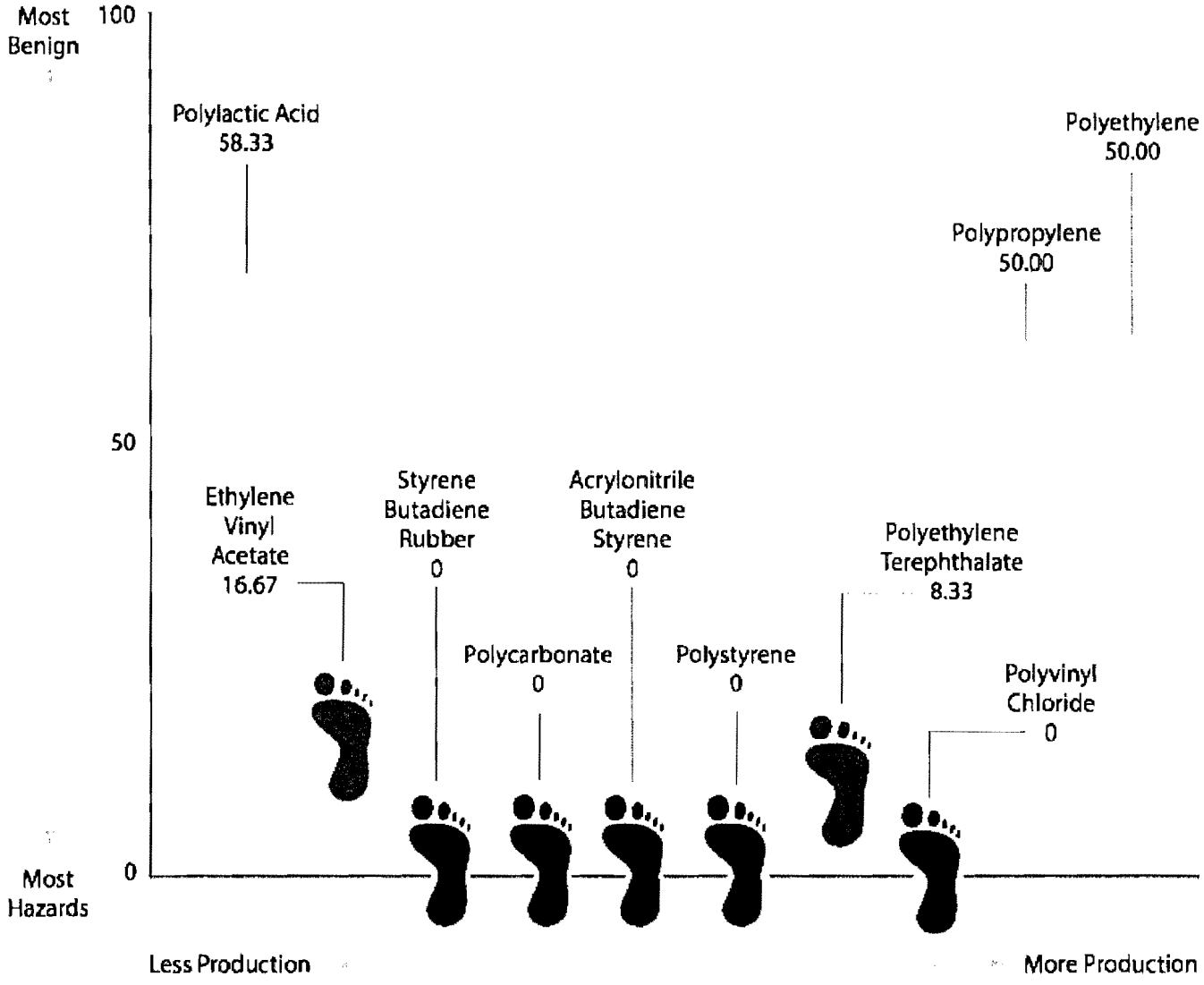
the wide availability of compostable service ware, which went from 70 products to 700 in 3 years, and now has reached more than 4,780.[6]

However, this part of the bill will only be effective if there are places to compost compostable products. Most food scraps and compostable ware collected in Maryland has been going to a very large scale facility in Delaware. This facility has been having problems and underscores the need for close-in locally based composting. I urge not only to pass this bill but also to look at policies to advance comprehensive locally based composting in the county.

[6] See Addendum B to this testimony; and the Biodegradable Products Institute web site at: http://products.bpiworld.org/companies/category/foodservice

Addendum A

FIGURE ES-1 **Progress to Safer Chemicals in Polymer Manufacturing**



☐ For each manufacturing step, no core chemical inputs are chemicals of high concern as defined by GreenScreen® Benchmark 1.

■ Some manufacturing steps include chemicals of high concern as defined by GreenScreen® Benchmark 1, and others do not.

■ Every manufacturing step involves the use of chemicals of high concern as defined by GreenScreen® Benchmark 1.

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Addendum B: Local Government Policies Make a Difference

Consider Seattle: Composting Infrastructure Well Established throughout City (in part due to City's foodservice packaging requirements)

Fast food, outdoors.

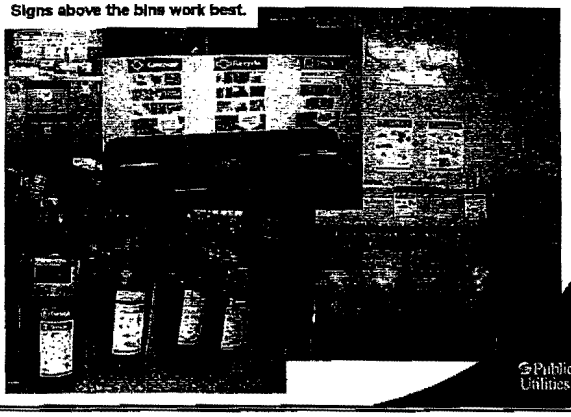
Dick's Drive-In

Ivar's on the waterfront

Seattle Public Utilities

The restaurant scene, so to speak.

Signs above the bins work best.



Public Utilities

Street fairs and summer festivals are no exception.

Seattle Public Utilities

What made it work?

1. A strong regional composter.
   - Based on established residential Food and Yard Waste collection.
2. Product testing to prove compostability.
   - So restaurants know what they can use.
3. Strong drive to increase commercial food waste collection for composting.
   - Synergy with front-of house compostables disposal in quick serve restaurants (QSRs).
4. Thanks to industry, increasing availability of compostable service ware.
   - From 70 to 700 products in 3 years.

Seattle Public Utilities

What made it work?

5. Lots of outreach to restaurant and packaging industries.
   - Product fairs and workshops where new products were shown;
   - Stakeholder meetings that brought restaurants, manufacturers and distributors together;
   - Direct mail to Seattle food service businesses – including institutions.
   - Regular presence at restaurant industry trade shows;
   - Thousands of site visits – still!
   - And a few fines for EPS use.
6. Local curbside and commercial recycling systems that accept coated papers and nearly all plastics.

Seattle Public Utilities

7. Talking to the public.

Free signs available on line that can be customized by each restaurant.

Seattle Public Utilities

Source: Dick Lily, Manager for Waste Prevention and Product Stewardship, Seattle Public Utilities, "How Local Government Policies Can Impact The Biopolymers Industry: Seattle's Regulation of Single-Use Food Service Packaging," Presentation at the International Biopolymers Symposium, San Antonio, October 15-17, 2012.

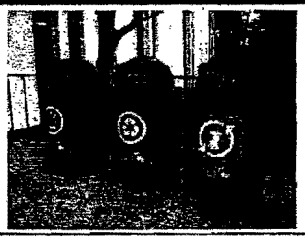
Addendum B: This is Seattle. Why Not Montgomery Co.?

Westlake Center food court

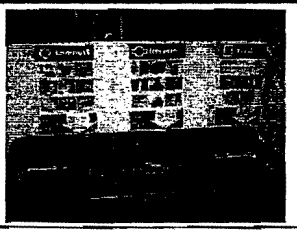
Café Vita Coffee

Northwest Hospital

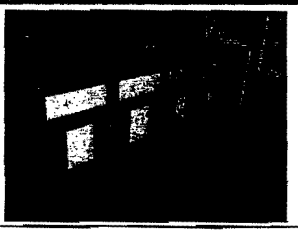
Seattle University campus



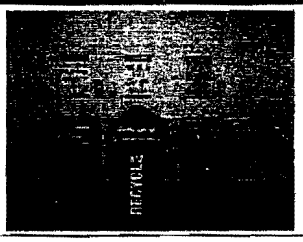
Seattle University



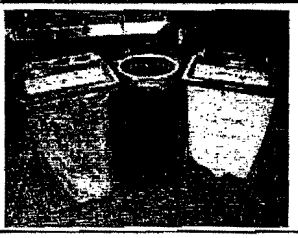
Seattle University



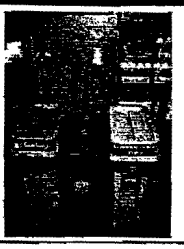
Qwest Field stadium



Festivals & Events

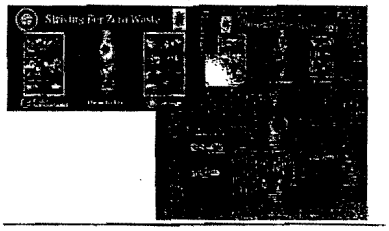


Café Zum Zum

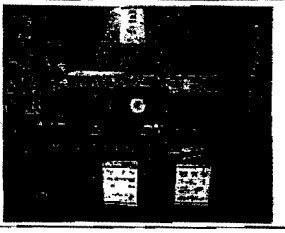


UW Husky Stadium

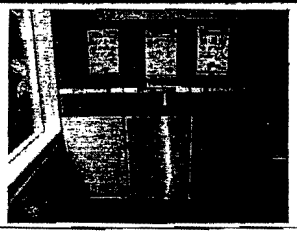
Safeco Field



Cherry Street Coffee



Metropolitan Market

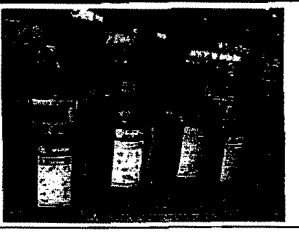


Flair Taco - taco truck

Rancho Bravo taco truck

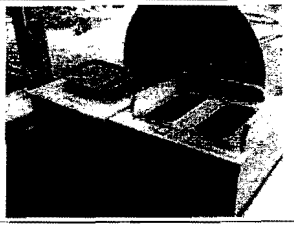
McDonald's

Northgate Mall



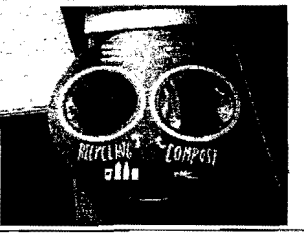
Dick's Drive In

Kidd Valley

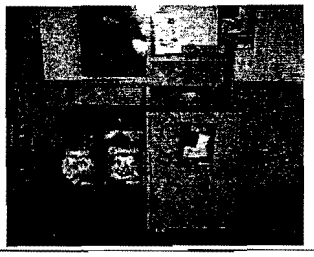


Key Arena at Seattle Center

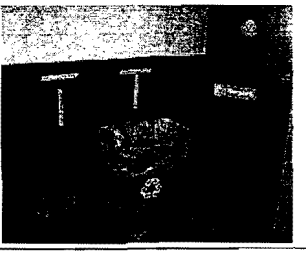
Starbucks Coffee



Subway



Po Dog's hot dog cafe



19

Testimony on Bill #41-14 –
Solid Waste (Trash) - Food Services Products -
Packaging Materials - Requirement
Position: Support

Trash Free
MARYLAND

Good evening, my name is Julie Lawson. I am the director of the Trash Free Maryland Alliance, a network of more than 60 organizations and businesses dedicated to reducing trash pollution through a common policy agenda. We strongly support the proposed ban on polystyrene foam and are thrilled by the County's leadership on this issue.

Our members who hold community and stream cleanups can speak to just how much foam pollution they find in County streets, parks, and streams, so I just have a few points about implementation of the ban. I am happy to work with the committee and the Department on any additional research, development of the regulations, and implementation.

- **We can do better than New York City.** Earlier this year New York City passed a ban, but it is delayed for a year to allow for a pilot effort to recycle foam across the city. The market for food-contaminated foam recycling is weak and requires costly infrastructure and transportation. I hope that the County does not cave to industry claims about recycling which simply serve as a distraction and delay from real progress in cleaning up our neighborhoods and waterways.

- **Work with Baltimore and DC.** Washington, DC, passed a similar foam ban this summer, to take effect the same day as this proposal. The Baltimore City Council introduced a polystyrene ban in 2012, with a majority of councilmembers signing on as cosponsors. It is on hold for now until a stronger plan for business outreach and public education is in place, but there are opportunities for the County to collaborate on cooperative purchasing agreements and resources for businesses. Having three large jurisdictions in this region ban polystyrene will significantly increase opportunities for commercial food waste composting services as well, creating a regional industry that could yield hundreds of jobs while reducing the amount of material sent to landfills and incinerators. The County has a strong advantage, also, because of resources available through the disposable bag fund, and capacity within DEP from administering and enforcing the Bag Law already.

- **Sustainable businesses support this measure.** Many food retailers already use compostable alternatives as part of their business model. These are the types of businesses that drive further economic development and the community wants in their neighborhoods. For those businesses yet to make the switch, alternative packaging is already available from the same suppliers they already use, at comparable prices. At the end of the day, packaging is a small fraction of overall overhead costs for food retailers, but the impact on perception, as well as the environment, is profound.

- **Polystyrene as a water pollutant.** One drawback to the a polystyrene ban compared to a disposable bag fee is that this proposal doesn't really lead to significant behavior change, only a change in materials. However, this change is significant for the County's environmental health. Polystyrene is special among plastics as it is the most toxic in the water. It is laden with polyaromatic hydrocarbons (PAHs) by virtue of its manufacturing process, which it then leaches into the water. In addition, according to research conducted by Dr. Chelsea Rochman of the University of California at Davis, polystyrene absorbs petrochemicals like fertilizer and

pesticides already in the water at a rate 10 times higher than any other plastic. That means the polystyrene bits floating in our already polluted rivers are further contaminated, potentially harming both wildlife that may ingest it as well as volunteers who might pick it up during cleanup activities.

Finally, I just want to show what our plastics consumption results in. While the garbage patch in the northern Pacific is relatively well known, these plastic soups circulate in gyres around the world. This jar contains a sample of plastic found in the North Atlantic Ocean.

Thank you for your time today, and I look forward to any questions.

Contact:
Julie Lawson
Trash Free Maryland Alliance
410-861-0412
julie@trashfreemaryland.org

Jennifer Chambers - Hiking Along, Owner; The Siena School, Science Teacher; Leave No Trace, MD State Advocate; American Hiking Society, Chair; Author

Why should Montgomery County ban the use of Styrofoam?

Two perspectives:

I. Hikers

A. kids and parents love to hike on rocks and along water

B. Chair of American Hiking Society, own Hiking Along and wrote a book entitled *Best Hikes with Kids: Washington DC, The Beltway & Beyond*

1. multiple hikes in book along streams and rivers in MoCo
   a. Potomac
   b. Little Paint Branch
   c. Northwest Branch
   d. Rock Creek
   e. Muddy Branch
   f. Cabin John
   g. along every stream the eye-catching, visual eye soar of Styrofoam exist (visualize)
      (1) floating in bits over a riffle or caught in an eddy
      (2) whole food containers lodged in the webbing of exposed tree roots
      (3) inhibits the hiker's joy and peace in the natural landscape

II. Animals

A. Environmental Educator and Science teacher who wrote a book entitled *Watershed Adventures of a Water Bottle*

1. journey of a water bottle through the Chesapeake Bay watershed and Atlantic ocean
2. perspective of the animals in my book
   a. beaver - litters my dam and lodge, would you want trash in your chamber?
   b. water strider - clogs the eddies preventing me from reaching the bugs that fall from the trees
   c. blue heron - my babies might think the small bits of styrofoam are bugs
   d. atlantic puffin - I mistake the styrofoam and other plastic debris in the ocean for fish when flying high above the water
   e. engage my students to understand that plastic pollution, including styrofoam, has a high impact on the pride of our communities, the beauty of the visual, natural landscape and the death of animals in our local and global aquatic ecosystems

RESTAURANT ASSOCIATION MARYLAND

Council Bill 41-14

Solid Waste (Trash) - Food Service Products - Packaging Materials – Requirements

October 14, 2014

***POSITION:* Oppose as drafted**

Mr. President and Members of the Montgomery County Council:

On behalf of the Montgomery County members of the *Restaurant Association of Maryland*, we oppose Council Bill 41-14 as this legislation is currently drafted. However, we hope to work with the bill sponsors and the Transportation, Infrastructure, Energy & Environment Committee on compromise language to address some of our concerns and mitigate the negative impact on the foodservice industry.

Of particular concern to our industry is the cost and performance of alternative compostable or recyclable disposable food service ware. According to the feedback we received from some of our Montgomery County members regarding this legislation, compostable and recyclable alternatives can cost over twice as much as expanded polystyrene. Moreover, finding suitable, safe, affordable alternatives for hot food and beverages can be particularly challenging. While this legislation allows for exemptions if the County Executive determines that no affordable compostable or recyclable alternatives exist, the bill does not define the term "affordable." We hope to work with the sponsors and the Committee to determine an appropriate definition.

While some of our members seem less concerned about banning the use of expanded polystyrene, there is significant industry concern about mandating the use of more expensive compostable products when most of these alternatives are likely to end up in the regular solid waste stream as opposed to a composting facility. There is also industry confusion about which disposable food service ware is accepted in the County recycling collection program.

For these reasons, we hope that we can work with the Council to clarify some of these issues and reach a compromise that will reduce any unintended burden on our industry.

Sincerely,

Melvin R. Thompson
Senior Vice President

Restaurant Association of Maryland 6301 Hillside Ct Columbia, MD 21046 410.290.6800 FAX 410.290.6882

October 14, 2014

RE: Testimony in Opposition to Bill No. 41-14 Solid Waste (Trash) – Food Service Products – Packaging Material – Requirements
And
In Support of a County-Wide EPS Recycling Program

Council Office Building
100 Maryland Avenue, 5th Floor
Rockville, MD 20850

Banning foam (expanded polystyrene – ESP) will not eliminate Montgomery County's litter issues. Litter is the improper disposal of a product regardless of the material for which it is made. Litter is the result of irresponsible human behavior. Municipalities may incorrectly believe that if they ban foam their litter/waste issues will be significantly resolved. This is not the case. After San Francisco banned foam, the city conducted an audit and it was confirmed that eliminating all foam foodservice did not reduce the volume of litter but simply changed the type of litter found. In addition, in Carmel, California, City staff confirmed in a June 3, 2008 staff report that since the inception of its 1989 ordinance to ban foam foodservice ware, "...the problem of food packaging waste litter has not improved". Foam makes up less than 1.5 percent of Montgomery County's solid waste stream and only a small percentage of that 1.5% is from foam food service products.

I. Foodservice Packaging Materials Life Cycle Analysis

Franklin Associates Ltd conducted an extensive and comparative analysis at the energy and environmental performance of foodservice packaging products made with polystyrene foam, bleached paperboard or corrugated paperboard, including hot and cold beverage cups and sandwich clamshells.[i] This comprehensive study meets international standards (ISO 14040) and has been independently peer-reviewed. The full report may be downloaded at www.dart.biz.

This life cycle analysis offers a cradle-to-grave picture of a product's environmental attributes, from raw material extraction and manufacturing to post-use recovery or disposal.

The study evaluated products across the full range of resource and energy use, solid waste generation, atmospheric emissions and waterborne emissions. Comparisons between systems were summarized for four key performance areas: energy, solid waste (weight), solid waste (volume), and greenhouse gas emissions.

Report Highlights

Comparisons between alternative materials were summarized for four key performance areas: energy, solid waste (by weight), solid waste (by volume), and greenhouse gas emissions.

In the four key areas, the study demonstrates that in most cases alternatives to foam have environmental burdens that are higher than or comparable to polystyrene foam products. These include plastic-coated paperboard cups for hot beverages (both with and without a corrugated sleeve), plastic-coated and wax-coated cups for cold beverages, and fluted paperboard clamshells (p. ES-16; pp. 2-60 through 2-63).

The report concludes the average plastic-coated paperboard cup versus the average polystyrene foam cup results in over twice as much energy use and solid waste by volume, over five times as much solid waste by weight, and nearly twice as much greenhouse gas emissions as the use of a single polystyrene cup. (pp. 2-7, 2-23, 2-43, and 2-60)

II. Benefits of Foam Physical Properties

A. Insulation

The raw material for foam is expanded polystyrene. Beads of polystyrene are placed into a mold and expanded. Because of the large expansion that takes place it only takes a few beads and little energy to make the final product. The material content in foam cups is very low, most of the cup, at least 90%, is air. It is the air that gives foam cups its remarkable insulation properties.

A standard paper cup is lined with plastic (polyethylene). These paper products take more than 20 years to decompose in a modern landfill environment. This is due to the plastic coating lining the inside of the paper cup. As noted above, paper products take more energy, raw material and money to make.

Foam products' physical characteristics provide better insulation than paper or other alternative material. With hot liquids or foods, foam products retain heat longer while remaining cool to touch. The only way to make the paper products, for example a paper cup for hot use, is to add more paper in the form of a cardboard sleeve. While most hot

paper cup sleeves are made from recycled materials, they are still an additional item to the consumer and waste is increased in the amount of materials used versus foam.

B. Environmental Benefits of EPS

Nearly all primary use factors favor polystyrene foam over paper. Once used both products may be recycled. Foam occupies less landfill space than paper; however, polyethylene line paper provides nearly no decomposition under dry conditions. Whereas, paper products under wet landfill conditions biodegrades and produces methane - a significant greenhouse gas and over 20% more volatile than carbon dioxide to the atmosphere. Both materials can be incinerated cleanly in a municipal waste stream with the option of energy recovery, to yield an ash volume of 2%–5% of the incoming waste volume.

C. Cost

The economic impact of banning foam or any material has macro and micro economic affects. At the manufacturing level, people earn their living manufacturing foam products. At a local city level, many small and large businesses, hospitals, schools, humanitarian groups choose foam products since they are not only sanitary but cost effective.

The typical paper cup costs more than twice as a foam cup, if you add a cardboard sleeve and add its production, raw material, energy and shipping needs, you need to throw in an additional 2-3 cents per cup. Modifying or customizing a foam cup is nearly half the price of customizing a paper cup.

D. Recyclability

There are many misperceptions regarding foam and its recyclability. Foam is 100% recyclable. Recycling foam consists of densifying, cleaning and pelletizing post-consumer foam products. These pellets are then used to create other durable plastic products such as building insulation, plastic lumber, and picture frames.

Dart Foam Recycling Programs

In 1990, Dart began recycling post-consumer foam. Today, Dart offers to the public a variety of ways for recycling of foam. Fifteen Dart facilities have public drop-off centers for foam. These drop-off centers are open 24hours a day, 7days a week and are at no charge to any resident consumer and accept both Dart and all other brands of foam. In addition, the drop-off centers collect both post-consumer and clean foam such as shape molding.

It is also important to note, two recycling programs Dart operates for collecting and recycling foam - Recycla-Pak and CARE. Recycla-Pak is an easy way for anyone to

recycle foam cups. The Recycla-Pak collection bin doubles as the shipping carton used to return foam cups for recycling at a Dart or industry recycling facility. The bin is shipped flat and, after a simple assembly, it is ready for collecting used foam cups for recycling. During use, the divided interior of the bin keeps the collected cups neatly stacked. This serves to maximize the number of cups that will fit into the bin as well as discourage users from depositing anything but used foam cups.

Dart's "Cups Are Recyclable" (CARE) program makes recycling polystyrene foam food service products easier for our customers. The CARE Program helps large operators using foam food service products separate the foam from other products, compress the collected material in a densifier provided by Dart, then Dart picks it up for transportation to a recycling facility.

Apart from Dart's foam recycling opportunities, cities such as the City of Los Angeles and Sacramento offer curbside collection. Dart continues to work to establish more municipal collection and recycling programs.

To read more about foam recycling and the programs mentioned please visit: http://www.dartcontainer.com/web/environ.nsf/pages/dropoff.html.

Thank you for your careful and thoughtful consideration of this important matter.

Additional information on Dart, foam recycling, foam foodservice products and the environment can be found on our website http://www.dart.biz

Sincerely,

Paul Poe
Manager, Government Affairs and the Environment

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[i] 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).

DART

Green Care: Foodservice Packaging Life Cycle Inventory

This new peer-reviewed study from Franklin Associates Ltd. provides an extensive and comparative look at the energy and environmental performance of foodservice packaging products made with polystyrene foam, bleached paperboard or corrugated paperboard, including hot and cold beverage cups and sandwich "clamshells." Known as a life cycle inventory, or simply LCI, the study offers a cradle-to-grave picture of a product's environmental attributes, from raw material extraction and manufacturing to post-use recovery or disposal.

The 2006 Foodservice Packaging LCI evaluated products across the full range of resource and energy use, solid waste generation, atmospheric emissions and waterborne emissions. Comparisons between systems were summarized for four key performance areas: energy, solid waste (weight), solid waste (volume), and greenhouse gas emissions. The full report, 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), may be downloaded at www.dart.biz.

This LCI meets international standards (ISO 14040) and has been independently peer-reviewed. More information on the peer-review can be found on page PR-3 of the full report.

About Life Cycle Studies—What is an LCI?

A life cycle approach means we recognize how our choices influence what happens at each of these points so we can balance trade-offs and make informed choices that can help reduce overall burdens on the environment. In this regard, LCI studies are an essential source of information for government, scientists, manufacturers and retailers, and individuals who want to make an educated environmental choice.

An LCI is a compilation and quantification of the inputs and outputs of a given product system. In this case, foodservice packaging products, including hot and cold beverage cups, plates and sandwich clamshells, were reviewed. LCI studies conduct a system analysis that begins with extracting raw materials from the ground for use as material feedstocks or fuels. Materials and energy use, as well as releases to the environment, are then assessed throughout product manufacturing, transportation, use, and management at the end of the product's useful life.

In Public Policy

LCI studies are particularly important in the public arena, where they can help policymakers arrive at well-informed decisions and avoid the shortcomings of focusing on a single environmental performance attribute. The 2006 Franklin LCI provides comparative information on air, water, solid waste and energy as well as a complete range of post-use options, such as recycling, composting, landfilling and waste-to-energy incineration. This enables policymakers to evaluate these factors in the broader context of other important environmental attributes spanning the product life cycle.

In the Foodservice Industry

Similarly, decision makers in the foodservice industry can assess the study's findings in combination with other important criteria, such as cost, convenience and product performance, to make better-informed choices about the products they use.

Foodservice Packaging Life Cycle Inventory (cont.)

Report Highlights

Comparisons between systems were summarized for four key performance areas: energy, solid waste (by weight), solid waste (by volume), and greenhouse gas emissions.

- In the four key areas, the LCI study demonstrates that in most cases the alternative products studied have environmental burdens that are higher than or comparable to polystyrene foam products. These include plastic-coated paperboard cups for hot beverages (both with and without a corrugated sleeve), plastic-coated and wax-coated cups for cold beverages, and fluted paperboard clamshells (p. ES-16; pp. 2-60 through 2-63).
- The report will disappoint gourmet coffee customers who believe they are doing something "good for the environment" by choosing to use two plastic-coated paperboard cups for one hot beverage instead of a single polystyrene foam cup. According to the data (derived from pp. 2-7, 2-23, 2-43, and 2-60) for the average plastic-coated paperboard cup and average polystyrene foam cup, this practice of "double-cupping" results in over twice as much energy use and solid waste by volume, over five times as much solid waste by weight, and nearly twice as much greenhouse gas emissions as the use of a single polystyrene cup.
- An average-weight polystyrene hot beverage cup requires less than half as much energy to produce as an average-weight polyethylene (PE) plastic-coated paperboard hot beverage cup with a corrugated cup sleeve (Table 2-2, p. 2-7).
- An average-weight polyethylene (PE) plastic-coated paperboard hot beverage cup produces almost three times as much total waste by weight as an average-weight polystyrene hot beverage cup (Table 2-10, p. 2-23).
- An average-weight polyethylene (PE) plastic-coated paperboard hot beverage cup with a corrugated cup sleeve produces almost five times as much total waste by weight as an average-weight polystyrene hot beverage cup (Table 2-10, p. 2-23).
- An average-weight polystyrene cold beverage cup requires just over one third as much energy to produce as a representative-weight wax-coated paperboard cold beverage cup (Table 2-3, p. 2-8).
- An average-weight polyethylene (PE) plastic-coated paperboard cold beverage cup produces almost two and one-half times as much total waste by weight as an average-weight polystyrene cold beverage cup (Table 2-11, p. 2-24).
- A representative-weight wax-coated paperboard cold beverage cup produces almost five times as much total waste by weight as an average-weight polystyrene cold beverage cup (Table 2-11, p. 2-24).

Sources

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)

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The Industry Standard of Excellence
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Green Care: Environmental Facts about Dart Foam Products

Most paper foodservice products are coated with wax, polyethylene plastic, or other non-biodegradable materials and are, therefore, essentially no more degradable than foam.

Polystyrene foam, like most plastics, does not biodegrade.[1] The lack of biodegradation may be a positive feature of plastics, according to Dr. William L. Rathje, an archaeologist with the University of Arizona's Garbage Project and one of the nation's foremost authorities on solid waste and landfills. "The fact that plastic does not biodegrade, which is often cited as one of its great defects, may actually be one of its great virtues," Dr. Rathje has written.[2] In fact, biodegradation can lead to the release of harmful methane gas or leachate, which can contaminate groundwater.[3]

The manufacture of polystyrene foam hot beverage cups requires less energy than the manufacture of comparable plastic-coated paperboard hot cups with sleeves, and the manufacturing of polystyrene foam cold beverage cups requires less energy than the manufacture of representative-weight wax-coated paperboard cold cups.

An average-weight polystyrene hot beverage cup requires less than half as much energy to produce as an average-weight polyethylene (PE) plastic-coated paperboard hot cup with a corrugated cup sleeve.[4]

An average-weight polystyrene cold beverage cup requires just over one-third as much energy to produce as a representative-weight wax-coated paperboard cup.[5]

Plastic-coated paperboard cups don't insulate as efficiently as foam cups.

Plastic-coated paper cup users frequently use two cups together for hot beverages to protect their hands. This "double cupping" of an average-weight polyethylene (PE) plastic-coated paperboard cup results in over twice as much energy use and solid waste by volume, over five times as much solid waste by weight, and nearly twice as much greenhouse gas emissions as the use of a single average-weight polystyrene cup.[6]

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.[7]

Polystyrene foam can be recycled as part of an integrated solid waste management strategy.[8]

Paper foodservice disposables, on the other hand, are rarely recycled. To assist in improving polystyrene recycling rates, Dart Container Corporation established several polystyrene foam recycling facilities in the US and one in Canada. For information on any polystyrene recycling programs that may be available in your area, please visit the Environment section of our website at http://www.dart.biz or call 1-800-288-CARE.

Polystyrene foam is composed of carbon and hydrogen. When properly incinerated polystyrene foam leaves only carbon dioxide, water, and trace amounts of ash.[9]

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.[10]

Polystyrene foam foodservice products do not "clog" landfills.

Polystyrene foam foodservice products constitute less than 1 percent, by both weight and volume, of our country's municipal solid waste.[11]

For additional environmental information, visit our website at www.dart.biz

Notes

[1] The Polystyrene Packaging Council, *Polystyrene And Its Raw Material, Styrene: Manufacture and Use*, November 1993, p. 1.

[2] William L. Rathje, "Rubbish!" *The Atlantic Monthly*, December 1989, p. 103.

[3] William Rathje and Cullen Murphy, "Five Major Myths About Garbage, and Why They're Wrong," *Smithsonian*, July 1992, p. 5.

[4] 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), Table 2-2, p. 2-7.

[5] Ibid, Table 2-3, p. 2-8.

[6] Ibid, pp. 2-7, 2-23, 2-43, 2-60.

[7] Judd H. Alexander, *In Defense of Garbage* (Westport, CT: Praeger Publishers, 1993) p. 55.

[8] The rate of recovery for recycling of polystyrene disposables and protective packaging more than doubled from 1989 to 1994. Since 1994, outlets for recycling polystyrene foam have declined for a number reasons, including poor economics and an increasing awareness by many consumers that other methods of solid waste management exist. For example, foam loosefill packing material may be reused and polystyrene and other plastic products can be easily and safely incinerated. Franklin Associates, Ltd., *Waste Management and Reduction Trends in the Polystyrene Industry, 1974–1994*, June 1996, pp. 17–18; Updated August 1999.

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

[10] 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.

[11] Moreover, 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 Franklin Associates, Ltd., *Municipal Solid Waste in the United States 2003 Facts and Figures* (Prepared for the U.S. Environmental Protection Agency, April, 2005).

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Environmental Resources Planning, LLC

October 14, 2014

Councilmember Reimer
Vice-President Leventhal
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Subject: Bill 41-14 Solid Waste (Trash) – Foodservice Products Packaging Materials – Requirements – Environmental Resources Planning Comments (Oppose)

Dear Honorable Councilmember Reimer and Vice-President Leventhal,

Thank you for providing me the opportunity to share our data regarding polystyrene foam food service products in litter.

My name is Steven Stein, Principal of Environmental Resources Planning LLC, the nation's most experienced private firm in the field of litter surveys and litter-related studies examining and documenting the types and amounts of litter found in our nation's communities as well as their effects on our communities' environmental and economic well-being. Field crews under our direction have surveyed more than 21 million square feet adjacent to roadways and recreational areas throughout the U.S.

Our litter-related work has been featured in National Geographic magazine, Time magazine and the New York Times as well as on ABC's Good Morning America and NPR. Our senior staff has authored numerous litter-related reports including Litter: Literature Review in 2007.

Our experience conducting statistically-based litter surveys includes leading Keep America Beautiful's 2009 National Litter Survey, eight statewide litter surveys, four citywide litter surveys and litter surveys of 75 beaches in California. We have provided pro-bono assistance to groups such as Ocean Conservancy, Potomac Watershed Initiative and World Ocean Council.

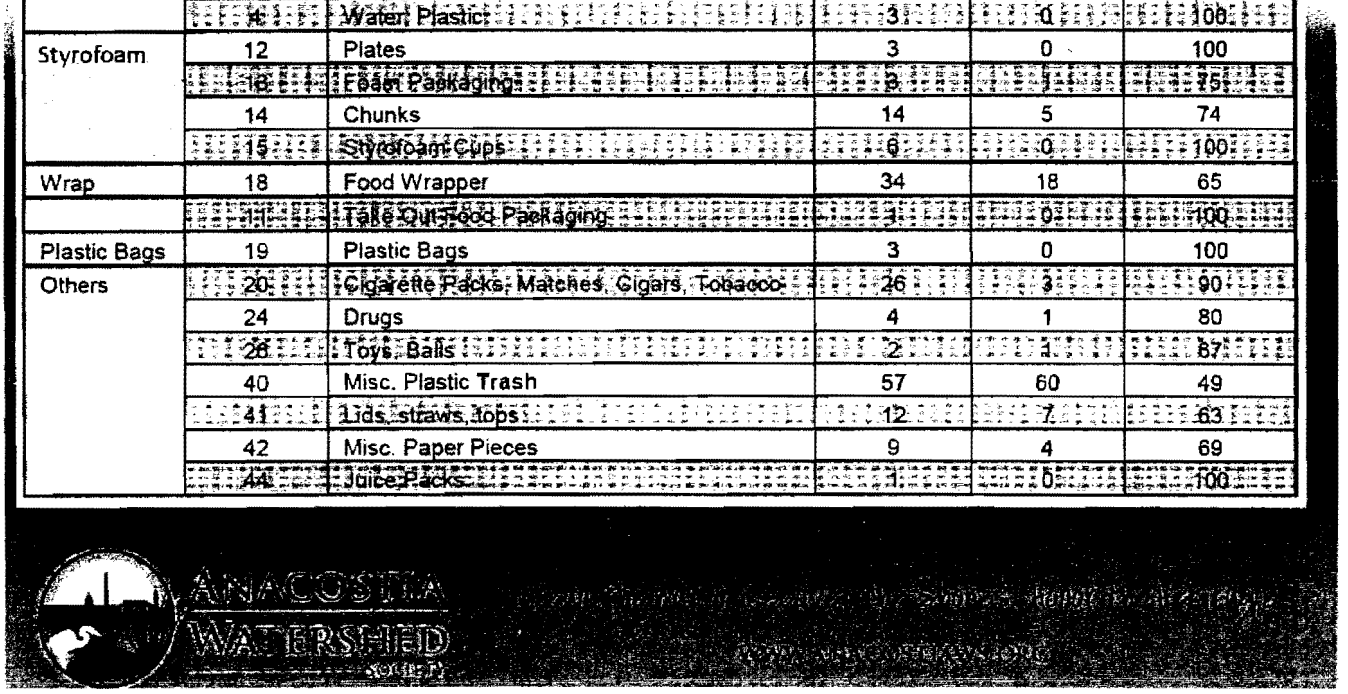
Litter surveys using statistically-based methodologies consistently find that polystyrene food service products comprise a minute portion of litter. Our May 2012 study on this question showed that these items comprise a median average of just 1.5 percent of litter. A revision of that study in August 2014 showed that number dropping now to just 1.1 percent of litter.

Ocean Conservancy sponsors beach cleanup days throughout the U.S. and internationally each year. Based on data from 2,609 U.S. sites surveyed in 44 states in 2013, all polystyrene foam food service items – which they characterized as foam cups, plates and take-out containers - comprised just 2.1 percent of all U.S. beach litter.

Most of the polystyrene foam products found in litter are not food service items at all, but are packaging. The table below is from an Anacostia Watershed Society PowerPoint on Nash Run Trash Trap data. While 26 items were identified as "Styrofoam", 72 percent of these items were packaging (including the chunks). Only 9 of these items were food service products such as cups and plates.

Table 1: Trash Removal Ratio by Re-bar Screen for Each Trash Category

	Trash Category Number	Trash Category	# of trash pieces on re-bar screen	# of trash pieces on plastic net under rebar screen	Trash Removal Ratio by Re-bar Screen (%)
Bottles	1	Liquor	1	0	100
	3	Soft Drink	2	0	100
	4	Water Plastic	3	0	100
Styrofoam	12	Plates	3	0	100
	13	Foam Packaging	3	1	75
	14	Chunks	14	5	74
	15	Styrofoam Cups	6	0	100
Wrap	18	Food Wrapper	34	18	65
	11	Take Out Food Packaging	1	0	100
Plastic Bags	19	Plastic Bags	3	0	100
Others	20	Cigarette Packs, Matches, Cigars, Tobacco	26	3	90
	24	Drugs	4	1	80
	28	Toys, Balls	2	1	67
	40	Misc. Plastic Trash	57	60	49
	41	Lids, straws, tops	12	7	63
	42	Misc. Paper Pieces	9	4	69
	44	Juice Packs	1	0	100



As a science-based professional, I am concerned that narrowly focused policies restricting the use of minor litter components will not resolve littering issues and may create a false sense of security that these issues have been addressed while, in fact, they will continue to fester. Litter abatement can only be achieved by addressing known sources of litter with a commitment to consistent education and enforcement of anti-litter statutes bearing a clear message: Littering is not acceptable in our communities and there will be a cost to those who do so.

Our firm is just starting a comprehensive litter survey of the Anacostia Watershed. Of the total sites, 75 percent will be in the District of Columbia, while 25 percent will be in Montgomery and Prince George's Counties. The data from this survey, which includes 90 different categories of litter, will provide you with a better understanding of the types and amounts of litter in Montgomery County and a better basis for making decision about the components of litter.

Thank you for providing me this time.

Sincerely,

Steven R. Stein, Principal
Environmental Resources Planning, LLC
624-B Main Street
Gaithersburg, MD 20878

MRA
Maryland Retailers Association
171 Conduit Street, Annapolis, MD 21401
(410) 269-1440 • Fax (410) 269-0325 • www.mdra.org

Maryland Retailers Association Opposes Bill 41-14

Maryland Retailers Association appreciates the opportunity to testify on Bill 41-14, which would ban single use polystyrene foam from food service facilities. The Maryland Retailers Associations believes a comprehensive approach to recycling and product stewardship is a much better way to address recycling and litter control than a product-byproduct regulation. Bill 41-14 will increase costs, not solve the behavior of littering and will not help Montgomery County achieve sustainability goals. For these reasons, MRA opposes Bill 41-14.

Polystyrene is a light, safe product that has become widely used by consumers and industry. The alternatives to its use are substantially more expensive products and use more energy to manufacture and transport. The economy has not recovered and cash strapped consumers have been struggling to manage their budgets. The costs increases will reduce sales in grocery stores in Montgomery County, as consumers will shift their purchasing to neighboring jurisdictions, or reduce their purchases because of limited budgets. With reduced sales, retailers will be forced to cut expenses, which could lead to reductions in hours for their employees. Thus, the measure would adversely impact workers in the establishments, which will be impacted by the proposal.

By banning polystyrene, the County will deprive its citizens of access to products and packaging that everyone else in Maryland will still use. A Styrofoam coffee cup can be purchased in Howard or Fredrick Counties, but not in Montgomery County if this measure passes. Today's consumers have a plethora of choices, including purchasing products that are not polystyrene. However in many cases, they choose to buy the polystyrene product because of costs, convenience and consumer choice. There is not a health issue at stake, since the Food and Drug Administration has determined for decades that polystyrene is safe for use in food service products.

Littering is a behavioral issue that will not be solved by regulation of products that people decide to throw out a car window or drop on the ground. Bill 41-14, at best, will shift the littering problem from polystyrene foam to the replacement product. In addition, polystyrene is a minute part of the litter. MRA believes that it is rare that citizens improperly discard egg cartons. Years of study has shown that banning a specific product will not solve a litter problem.

Diverting recyclable materials from being thrown into the trash to recycling must be comprehensive in nature and simple for consumers. A robust comprehensive approach to

recycling is the best method of achieving the County's sustainability goals. MRA supports such an approach and is working with the Maryland Association of Counties in developing the best method to having attaining sustainability goals.

Removing polystyrene from the recycling system in Montgomery County will remove a good efficient source for the County's waste-to-energy facility on Covanta Dickerson Road. Polystyrene has more captured energy than coal. It seems counterproductive to remove such a product from use at the facility.

Bill 41-14 promotes compostable products, but there are no facilities to in the County to accept them. Such products as plates made from polylactic acid (PLA) require an industrial composting facility to properly manage the waste. The experience in the US House of Representatives should be a warning to how difficult it will be to achieve sustainability with these products. It will require the County to re-educate its citizens to sort and properly dispose of these products and change their behavior of putting all their recyclables at the curb or in a bin. This expense and return on it will be a long process for the County.

For the reasons stated above, MRA urges the Montgomery County Council to work with the impacted industries to develop a common sense solution to the issues raised by Bill 41-14. We are more than willing to participate in such a discussion.

ALEXANDER & CLEAVER

ATTORNEYS AT LAW

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October 14, 2014

Councilman Reimer
Council Vice President Leventhal
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

RE: Bill 41-14 Solid Waste (Trash) Foodservice Products Packaging Materials- Requirements- Environmental Resources Planning Comments (OPPOSE)

Dear Councilmembers Reimer and Leventhal:

Thank you for the opportunity to speak. I will be brief. I think Mr. Poe and Mr. Stein have the more important things to say. I appreciate what Councilman Reimer is trying to do- ban foam in Montgomery County. I also believe that a better and less extreme measure than an outright ban would be to study the viability and practicality of recycling foam.

I want you to give the residents of Montgomery County what my city, Washington, DC, did not have the courage or foresight to do -explore and exercise the option to include foam in their recycling stream and see if a reduction of foam occurs. I read the testimony of Mr. Poe and Mr. Stein. Mr. Poe is proposing a workable curbside recycling program

that could solve and certainly reduce what you believe is a foam litter problem. Mr. Stein's written testimony discusses a study that based on its protocol will provide an accurate measure and indicator of what litter is actually in the waste stream.

Please consider Mr. Poe's suggestions/recommendations and wait for the conclusion of Mr. Stein's study, before passing this bill. Thank you.

Sincerely,

Lorenzo Bellamy
Alexander & Cleaver, PA

American Chemistry Council | Plastics Food Service Packaging Group

October 13, 2014

Councilmember Hans Riemer
Councilmember George Leventhal
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Subject: Bill 41-14 Solid Waste (Trash) – Foodservice Products Packaging Materials – Requirements – American Chemistry Council Comments (Oppose)

Dear Honorable Councilmembers Hans Reimer and George Leventhal,

We'd like to thank you and the Montgomery Council for providing us, the Plastics Foodservice Packaging Group (PFPG) of the American Chemistry Council (ACC), to discuss our concerns with above referenced Bill 41-14 regarding solid waste (trash) requirements for foodservice products. Many of us at ACC also live in Montgomery Council, and we support the Council's ongoing efforts to make Montgomery County a more sustainable city, including efforts to reduce waste and improve recycling. However well-intentioned, banning polystyrene foam foodservice and requiring the use of alternative compostable products, when an infrastructure to adequately compost these products does not exist, will not improve sustainability in the County.

We urge the Council to defer this bill, since the premise is based on information that shows polystyrene foodservice products are not recycled – when in fact they are recycled in many communities. This bill is also based on misinformation about these products contribution in the Anacostia River as litter. We are also invested in cleaning up the Anacostia here at ACC and have been doing so by supporting groups like Living Classroom's Anacostia River Cleanup with youth since 2007 at $12,000 annually, helping to change behavior – which is at the heart of littering.

Here's information that should demonstrate how the issues of foodservice litter and trash are being addressed and how Montgomery County can capitalize on these programs without implementing a product ban such as those containers in Bill 41-14:

Polystyrene foam foodservice is a small part of litter (1.5%). Polystyrene foam foodservice packaging makes up only 1.5 percent of litter, according to a May 2012 national report by environmental consulting firm Environmental Resources Planning. Montgomery County has cited a Nash Run sampling of polystyrene foam in the Anacostia and has mischaracterized the amount of polystyrene foam foodservice in litter. Litter is a behavior problem, not a product issue. In the Washington, D.C. area alone since 2007, our industry has funded Living Classroom's Anacostia River Cleanup with a donation of $12,000 each year. Living Classroom hosts a river cleanup behind Capitol Hill with nearly 200 local youths, and educates youth about the enormous impact that debris of all types have on the Anacostia River. Studies have also shown that banning a specific item like polystyrene foam foodservice will not solve the litter issue – it will merely change

the type of litter that still needs to be reduced. The industry is conducting a comprehensive Anacostia River litter study with over 50 sample points in the District and Maryland. The results of that study will help Montgomery County adequately identity and prevent sources or litter, and also assess key contributors.

Recycling solutions for post-use foodservice are emerging. Polystyrene foam foodservice packaging is being recycled in many communities across the country. For example, more than 20 percent of Californians can recycle polystyrene foam in curbside programs. In its recent enacted polystyrene foam foodservice ban, the Washington, D.C., city council refused to consider recycling of polystyrene foam in the District program – despite interest by District agencies to do so (the DPW and DDOE). A new study by the Berkeley Research Group (*Market Analysis of End Uses for Recycled Post-Consumer expanded polystyrene foodware*) found nearly 140 companies that process or use recycled post-consumer foam, including foodware, in the U.S. and Canada (http://www.fpi.org/fpi/files/ccLibraryFiles/Filename/000000000779/BRG%20Memo%20Report%2010-9-2014.pdf) . Banning this product when it can be recycled is not a sustainable solution.

Used polystyrene foodservice can help contribute an energy solution, too. Polystyrene foodservice also can be used as a source of energy. Polystyrene actually has more captured energy than coal. This energy is released when municipal solid waste is processed at waste-to-energy recovery facilities. The U.S. has 86 such facilities that can recapture this energy and put it to good use, creating a domestic energy source to power homes and business. Montgomery County uses the Covanta Dickerson Road, MD waste to energy facility to recover and reduce its waste, including polystyrene foam.

The Montgomery County, MD proposed ban on Foodservice Ware will not Achieve Sustainability Goals. Our industry supports the Montgomery County's efforts to make the County more sustainable, including efforts to reduce waste and improve recycling. However well-intentioned, the ban on polystyrene foam foodservice will not improve sustainability in the County. By promoting compostable products where opportunities to compost there products don't currently exist in the County, and by failing to examine recycling opportunities for polystyrene foam as many communities have. A polystyrene foam cup, for example, requires one-third of the energy to produce compared to some compostable alternatives. Paper cups would also be banned as part of the legislation since they are not recyclable in the District.

Polystyrene foodservice saves fuel, energy and greenhouse gas emissions to make and transport. Polystyrene foodservice uses less energy and resources to manufacture than alternatives. And as very lightweight plastic, shipping polystyrene saves precious fuel. A full life cycle study highlights the tradeoffs and advantages of polystyrene foam foodservice from an overall energy, air, water and waste perspective (http://plasticfoodservicefacts.com/Life-Cycle-Inventory-Foodservice-Products)

As far as the safety of polystyrene foodservice products, there is no question that consumers can know these products have been tested, come under the auspices of the U.S. FDA, and present no risk from a health and safety perspective:

Polystyrene is approved as safe for use in foodservice by the Food and Drug Administration (FDA). FDA has determined for more than 50 years that polystyrene is safe for use in foodservice products. A common but unnecessary worry about many plastics in foodservice is that they may have tiny amounts of constituents that can make their way into food. This is precisely one of the reasons why the FDA reviews and approves every material to be used in contact with food for safety — before it hits the market – and this includes a look at what might migrate out of the material, so FDA scientists and regulators are fully satisfied about the safety of the material.,

Polystyrene should not be confused with styrene. Polystyrene and styrene are different substances. Styrene, a liquid, and polystyrene, a solid are fundamentally different. Styrene is a liquid that can be chemically linked to create polystyrene, which is a solid plastic that displays different properties. Polystyrene is used to make a variety of important consumer products, such as foodservice containers, cushioning for shipping delicate electronics, and insulation. Equating polystyrene with styrene is like equating a diamond with carbon. They are not the same substance.

National Toxicology Program (NTP): "Let me put your mind at ease ..." NTP Director Dr. Linda Birnbaum, PhD., was widely quoted in Associated Press reports in June 2011 when the NTP decided to include styrene in its 12th Report on Carcinogens: "Let me put your mind at ease right away about polystyrene foam ... In finished products, certainly styrene is not an issue." Experts from the U.S. National Institute of Environmental Health Sciences (NIEHS) and the American Cancer Society, along with NTP's Associate Director John Bucher, have reached the same conclusions as Dr. Birnbaum. "Styrene should not be confused with polystyrene (foam). Although styrene, a liquid, is used to make polystyrene, which is a solid plastic, we do not believe that people are at risk from using polystyrene products" (NIEHS).

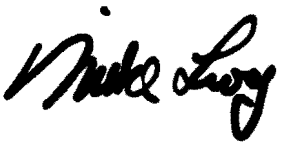
Styrene occurs naturally in foods such as strawberries and cinnamon. It is well documented that people are routinely exposed to styrene in larger amounts from common foods such as strawberries and cinnamon than from polystyrene foam foodservice.

Finally, polystyrene foam foodservice is widely used because of its unique insulation properties compared to other materials (keeps hot foods hot, cold foods cold), and is very inexpensive compared to non-polystyrene foam alternatives – it's 95% plus air:

Fiscal impact of the ban on polystyrene foam foodservice in the Montgomery County
An independent fiscal impact study conducted on what the replacement costs to consumers, businesses and agencies is very relevant for Montgomery County. The average cost premium to replace polystyrene foam foodservice purchases will be 60% for the lowest cost replacement scenario. In other words, for every $1 spent now by District (and Montgomery County, MD) agencies on polystyrene foam food service ware, the cost to purchase complying alternative food service ware would require an expenditure of $1.60. The average cost premium will jump to 140% if compostable replacements are required, or an expenditure of $2.40.

Based on the benefits of polystyrene foodservice as part of the waste management solution (rather than the problem), and the active litter prevention and cleanup of the Anacostia River, as well as energy recovery and fiscal benefits, we would urge Montgomery County to not act on Bill 41-14 and in fact work with our industry to educate the County on real solutions to address litter and solid waste. We appreciate your feedback, and please let us know if you have any questions on this material, or need additional information.

Regards,



Mike Levy, Senior Director
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tel: 202-249-6614
http://www.plasticfoodservicefacts.com

Vendors of Compostable or Recyclable Food Service Ware and Bags

Compostable = Wood (W), Compostable Plastic (CP), Molded Fiber (F) and Paper (P)

Recyclable= Aluminum (A) and Recyclable Plastic (RP)

SF Environment
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A Department of the City and County of San Francisco

	Vendor	Phone	Website	Boxes	Bowls	Cold cups & lids	Cutlery	Hinged & lidded containers	Hot cups & lids	Paper & compostable plastic Bags	Plates	Straws	Trays and Cup Holders
1	Alliance	(312) 666 6424	www.allpfs.com	P	F, RP	P, CP, RP	RP	A, F, P	P, RP	P	F, P, RP	RP	P, RP
2	American Paper and Plastic Inc *	(626) 444 0000	www.appinc.com	P	P, RP	CP, RP		CP	P, RP	P	P, RP	RP	
3	Anchor Packaging	(314) 822 7800	www.reusecontainers.com		RP			RP					
4	Arrow Tableware	(650) 871 8226	www.arrowtableware.com		F			F	F		F		F
5	Because We Care	(852 3) 711 3175	www.becausewecare.com.au							CP			
6	Bio Smart *	(888) 310 2008	www.biosmartpackaging.com	P	F, P	CP		CP, F	P	CP	F		F
7	Bio-DC *	(480) 704 3273	www.bio-dc.com							CP			CP
8	BioBag	(727) 789 1646	www.biobagusa.com							CP			
9	Biodegradable Foodservice*	(541) 593 2181	www.bdfs.net		CP, F			CP, F	P		F		
10	Biodegradable Store		www.biodegradablestore.com		F	CP	CP	CP, F	P, RP	CP	F		
11	Birchware	(888) 246 6089	www.birchware.com				W						
12	Branch	(415) 626 1012	www.branchhome.com		PF	CP, PF	CP		CP, P		PF		PF
13	BiRite *	(800) 227 5373	www.birite.com	P	CP, F	CP			P, RP	CP	F, P		
14	Bridge-Gate Alliance	(925) 417 0638	www.bridge-gate.com		F			F			F		F
15	Cash and Carry *		www.smartfoodservice.com		F, P	P, RP	RP	F	P, RP		F, P	RP	F
16	Costco	(800) 774 2678	www.costco.com		F, P	CP, P, RP	CP, RP		P, RP	CP	P	RP	
17	Disposable Food Service Products *	(818) 674 6112	www.sala-dfsp.com		F	F		F		CP	F		F
18	Earth Cycle	(604) 899 0928	www.earthcycle.com					F			F		F
19	EarthSmart LLC *	(310) 834 7336	www.earthsmartllc.com		F			F			F		F
20	Eaternal Plates	(847) 877 5648	www.eaternalplates.com		F						F		F
21	EcNow Tech *	(541) 223 3369	www.ecnowtech.com		F, P			F, RP	P		F		
22	Eco-Gecko Products	(510) 220 5393	www.eco-gecko.com		F		W				F		
23	Eco Greenwares	(510) 656 9440	www.ecogreenwares.com		F	CP	CP	F	P	CP	F		F
24	Ecoware Inc.	(604) 880 1148	www.ecowareproducts.com				W						
25	Everything Eco-Store	(415) 337 8814	www.everythingecostore.com		F	CP		F	P	CP	F		
26	Excellent Packaging and Supply *	(800) 317 2737	www.excellentpackaging.com	P	CP, F	CP	W	CP, F	F, P	CP	F	P	CP, F
27	Genpak *	(518) 798 9511	www.genpak.com		F	F		F			F		
28	Go Earth *	(310) 371 0797	www.goearthcentral.com		F	F		F	F		F		
29	Go Mega Green.com *	(415) 933 6569	www.gomegagreen.com		F	CP			P	CP	F		F
30	Good Flag Biotechnology Corporation	(886) 328 3911	www.biodegradable-product.com			CP, RP		CP, RP					
31	Goodwill Fair Trading Co.	(415) 203 7323			RP		RP	RP	P, RP				
32	Green Day Eco-friendly Material Co.,Ltd	(86 592) 516 3383	www.greendaycn.com				CP						
33	Green Duck	(804) 240 8757	www.shopgreenduck.com		F, P	CP	CP, W	F	P, RP	CP	F		

References to any commercial business, organization, or product does not constitute endorsement.

*Note that these vendors may carry non-compliant products in addition to those listed above.
Please review the Accepted Recyclable or Compostable Food Service Ware list at www.SFEnvironment.org/FoodService.

Vendors of Compostable or Recyclable Food Service Ware and Bags

Compostable = Wood (W), Compostable Plastic (CP), Molded Fiber (F) and Paper (P)

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	Vendor	Phone	Website	Boxes	Bowls	Cold cups & lids	Cutlery	Hinged & lidded containers	Hot cups & lids	Paper & compostable plastic Bags	Plates	Straws	Trays and Cup Holders
34	Green Home *	(415) 282 6400	www.greenhome.com	P	F	CP	CP, W	CP, F	F	CP, P	F, W		F
35	Green Is Green, Inc.	(415) 215 8553	www.greenisgreeninc.com		CP, F	CP	CP	CP, F	F	CP	F		F
36	Green Paper Products	(216) 990 5464	www.greenpaperproducts.com		F, P	CP		F	P, RP	CP	F		F
37	Green Wave	(714) 634 8822	www.greenwave.us.com					F			F		F
38	Greeno Products	(800) 313 6568	www.greenoproducts.com		P			F	P, RP		F		
39	IFN Green *	(510) 868 2891	www.ifngreen.com		F	CP	CP	W, F	P		F		F
40	Innoware	(800) 237 8270	www.innowareinc.com				RP	CP, RP			P		
41	InstaWares	(800) 892 3892	www.instawares.com	P	P	P, RP	RP	RP	P	P	P	RP	P, RP, A
42	Lets Go Green *	(678) 344 6834	www.letsgogreen.biz		F, P	CP	CP, W	CP, F	P, RP	CP, P	F		F
43	Litin Eco	(612) 607 5700	www.litineco.com		F	CP		CP	F	CP	F		F
44	Majestic Sales *	(877) 377 8023	www.majesticsales.net		F, RP	CP		P, RP	F, P	CP	F, P		RP
45	Maple Trade Corporation	(415) 822 3888	www.mapletradecorp.com		RP		RP	RP	P				
46	Nature Friendly Products *	(216) 464 5490	www.nfpco.com		CP, F	CP		CP	P	CP	F		F
47	Natur-Tec	(763) 404 8700	www.naturbag.com							CP			
48	Nexus Group *	(510) 567 1000	www.accessgroupnca.com	P	F, RP	CP, F, RP		A, F, P, CP, RP	F, RP	P, CP	F	P, RP	CP, P, RP
49	Oliver	(800) 253 3893	www.oliverquality.com										F
50	P & R Paper Supply	(909) 794 1237	www.prpaper.com	P	F, P, RP	CP, P	RP	F, RP	P	P	F, P, RP	RP	A
51	Pactiv *	(888) 828 2850	www.pactiv.com		RP	RP		RP	P		F		A, F, P, RP
52	Prime Link Solutions	(650) 375 1398	www.primelinksolution.com		F			F, P			F		F
53	Rainbow Grocery	(415) 863-0620	www.rainbowgrocery.org							CP	P		
54	Red Pod, Inc *	(650) 396 7550	www.earthtoearthpack.com						P, RP				
55	Restaurant Depot *	(714) 666 8211	www.restaurantdepot.com	P	P	P	RP	P, F	P, RP	CP, P	P		F
56	RestockIt	(800) 880 0859	www.restockit.com	P	P	P, RP	RP		P	P	P, RP		
57	S.F. Supply Master *	(415) 642 0700	www.sfsupplymaster.com	P	P, RP	CP, P, RP	RP	A, CP, P, RP,	P	P, CP	P, RP	P	P, RP, A
58	Sabert	(800) 722 3781	www.sabert.com		RP		RP	RP, CP					RP, F
59	Smart and Final	(800) 894 0511	www.smartandfinal.com			P	RP				P		
60	Stalkmarket	(503) 295 4977	www.stalkmarketproducts.com		F	CP	CP	CP	P, CP		F	CP	P
61	Sysco Food Services *	(510) 226 3000	www.syscosf.com	P	F, P, RP	CP, P, RP	RP	P, RP	P, RP	P, CP	F, P, RP	RP, P	F, P, RP
62	Tahoe Green	(530) 550 9440	www.tahoegreeninc.com		F, P	CP, F	CP	F	F, P	CP	F		F
63	The Webstaurant Store		www.webstaurantstore.com	P		CP		CP, P, RP		P			A, F, RP
64	US Foodservice	(877) 583 9659	www.usfoodservice.com		F, P, RP	CP, P	RP	F, P, RP	P	P, CP	F, P, RP	RP	F, P
65	Vegware	(860) 779 7970	www.vegware.us	P	F	CP	CP	F	CP, P	P, CP	F		
66	VerTerra Ltd.	(718) 383 3333	www.verterra.com		F						F		F
67	WorldCentric Store	(650) 283-3797	www.worldcentric.org		F	CP	CP	CP, F	F	CP	F, P		F

References to any commercial business, organization, or product does not constitute endorsement.

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Please review the Accepted Recyclable or Compostable Food Service Ware list at www.SFEnvironment.org/FoodService.

Updated 6/6/2012

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Bowl	12 oz		Cash&Carry	22709	$64.66	1000	$0.06	Bagasse
Bowl	12 oz		Cash&Carry	06466	$67.64	1000	$0.07	Misc Plastic
Bowl	12 oz		Worldcentric	BO-SC-U11-11.5oz	$61.85	1000	$0.06	Wheatstraw
Bowl	20 oz		Costco In-Store	296917	$9.59	135	$0.07	Fiber
Bowl	12 oz		Biomasspackagingstore.com	357-BL-12	$65.27	1000	$0.07	Bagasse
Bowl	12 oz		Costco Online	487730	$59.99	1000	$0.06	Bagasse
Bowl	12 oz		Costco Online	285675	$88.29	1000	$0.09	Bagasse
Bowl	12 oz		Costco Online	862043	$5.29	100	$0.05	Bagasse
Bowl	12 oz		Costco Online	554807	$67.99	500	$0.14	Fiber
Bowl	12 oz		Costco Online	713816	$42.99	500	$0.09	Fiber
Bowl	12 oz		Costco Online	1115	$9.57	175	$0.05	Fiber
Bowl	12 oz		Foodservicewarehouse.com	EP-BL12	$85.19	1000	$0.09	Bagasse
Bowl	12 oz		Restaurant Depot	UPC: 0760695024377-	$54.56	1000	$0.05	Fiber
Bowl	12 oz		Restaurant Depot	81212	$56.57	1000	$0.06	Misc Plastic
Bowl	12 oz		Smart and Final	47425-13.5oz	$2.59	30	$0.09	Bagasse
Bowl	12 oz		Smart and Final	36326	$7.99	125	$0.06	Fiber
Bowl	12 oz		Smart and Final	08326	$5.19	75	$0.07	Polystyrene #6
Bowl	8 oz		Biomasspackagingstore.com	226-L015 - 6 oz	$51.79	1000	$0.05	Bagasse
Bowl	8 oz		Foodservicewarehouse.com	DCC 5BWWF-6oz	$94.69	1000	$0.09	Misc Plastic
Bowl	8 oz		Smart and Final	38156-10oz	$2.69	35	$0.08	Bagasse
Bowl	8 oz		Smart and Final	07319-5oz	$3.99	75	$0.05	Polystyrene #6
Bowl To-Go	12 oz		Biodegradablestore.com	EP-BSC12-WA	$76.95	500	$0.15	Fiber w/PLA Lining
Bowl To-Go	12 oz		Biomasspackagingstore.com	226-BWL04	$41.67	500	$0.08	Bagasse
Bowl To-Go	12 oz		Biomasspackagingstore.com	453-25112	$81.99	500	$0.16	Fiber w/PLA Lining
Bowl To-Go	12 oz		Biomasspackagingstore.com	250-10012	$186.82	1000	$0.19	Fiber w/PLA Lining
Bowl To-Go	12 oz		Costco Online	211008	$50.58	500	$0.10	Fiber/Poly Coated
Bowl To-Go	12 oz		Dong Vinh Restaurant Supply	C-KDP12W	$59.00	1000	$0.06	Fiber
Bowl To-Go	12 oz		Dong Vinh Restaurant Supply	75002441	$42.00	500	$0.08	Polypropylene #5
Bowl To-Go	12 oz		Foodpackagingwarehouse.com	PW210GPU350	$81.67	500	$0.16	Bagasse
Bowl To-Go	12 oz		Foodpackagingwarehouse.com	SB0212	$83.63	250	$0.33	Fiber
Bowl To-Go	12 oz		Foodpackagingwarehouse.com	B12 C	$57.03	300	$0.19	Polypropylene #5
Bowl To-Go	12 oz		Foodservicewarehouse.com	EP-BSC12-WA	$74.79	500	$0.15	PLA
Bowl To-Go	12 oz	With Lid	Restaurant Depot	12BSB-E	$53.77	500	$0.11	Fiber
Bowl To-Go	12 oz		Restaurant Depot	DFRCP12CB	$40.18	250	$0.16	Fiber
Bowl To-Go	12 oz	With Lid	Wasserstrom.com	6017959	$61.98	250	$0.25	Fiber
Bowl To-Go	12 oz	With Lid	Wasserstrom.com	6002493	$57.88	250	$0.23	Fiber
Bowl To-Go	12 oz		Worldcentric	BO-PA-8	$68.69	500	$0.14	Fiber w/PLA Lining
Bowl To-Go	12 oz		Worldcentric	BO-SC-U12	$40.19	500	$0.08	Wheatstraw

Most locations offer additional products and discounts for bulk purchasing.

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Bowl To-Go	16 oz		Biodegradablestore.com	EP-BSC16-WA	$88.37	500	$0.18	Fiber w/PLA Lining
Bowl To-Go	16 oz		Biomasspackagingstore.com	250-10016	$111.23	500	$0.22	Fiber w/PLA Lining
Bowl To-Go	16 oz		Costco Online	181381	$58.81	500	$0.12	Fiber/Poly Coated
Bowl To-Go	16 oz		Dong Vinh Restaurant Supply	C-KDP16W	$65.00	1000	$0.07	Fiber
Bowl To-Go	16 oz		Foodpackagingwarehouse.com	PW210GPU500	$89.67	500	$0.18	Bagasse
Bowl To-Go	16 oz		Foodpackagingwarehouse.com	SB0216	$86.13	250	$0.34	Fiber
Bowl To-Go	16 oz		Foodpackagingwarehouse.com	B16 C	$59.05	300	$0.20	Polypropylene #5
Bowl To-Go	16 oz		Foodservicewarehouse.com	EP-BSC16-WA	$86.09	500	$0.17	PLA
Bowl To-Go	16 oz		Smart and Final	31445	$89.40	500	$0.18	Fiber
Bowl To-Go	16 oz	With Lid	Wasserstrom.com	6000637	$66.74	250	$0.27	Fiber
Bowl To-Go	16 oz		Worldcentric	BO-PA-16	$76.67	500	$0.15	Fiber w/PLA Lining
Bowl To-Go	16 oz		Worldcentric	BB-SC-U16	$54.44	500	$0.11	Wheatstraw
Bowl To-Go	20 oz		Dong Vinh Restaurant Supply	C-KDP20W	$59.00	600	$0.10	Fiber
Bowl To-Go	6 oz		Biomasspackagingstore.com	453-22006	$52.36	1000	$0.05	Bagasse
Bowl To-Go	8 oz		Biodegradablestore.com	EP-BSC8-WA	$115.15	1000	$0.12	Fiber w/PLA Lining
Bowl To-Go	8 oz		Biomasspackagingstore.com	453-25108	$116.34	1000	$0.12	Fiber w/PLA Lining
Bowl To-Go	8 oz		Biomasspackagingstore.com	250-10008	$135.29	1000	$0.14	Fiber w/PLA Lining
Bowl To-Go	8 oz		Costco Online	211006	$47.05	500	$0.09	Fiber/Poly Coated
Bowl To-Go	8 oz		Dong Vinh Restaurant Supply	C-KDP8W	$49.00	1000	$0.05	Fiber
Bowl To-Go	8 oz		Dong Vinh Restaurant Supply	75002440	$35.00	500	$0.07	Polypropylene #5
Bowl To-Go	8 oz		Foodpackagingwarehouse.com	PW210GPU8	$163.00	1000	$0.16	Bagasse
Bowl To-Go	8 oz		Foodpackagingwarehouse.com	PW210SOUP8	$125.67	500	$0.25	Fiber
Bowl To-Go	8 oz		Foodservicewarehouse.com	EP-BSC8-WA	$112.39	1000	$0.11	PLA
Bowl To-Go	8 oz		Restaurant Depot	8B5BE	$71.98	1000	$0.07	Fiber
Bowl To-Go	8 oz	With Lid	Restaurant Depot	DFRCP8CB	$36.26	250	$0.15	Fiber
Bowl To-Go	8 oz	With Lid	Wasserstrom.com	6017960	$59.24	250	$0.24	Fiber
Bowl To-Go	8 oz	With Lid	Wasserstrom.com	6000635	$56.62	1000	$0.06	Fiber
Bowl To-Go	8 oz		Worldcentric	BO-PA-8	$97.47	1000	$0.10	Fiber w/PLA Lining
Bowl To-Go	8 oz		Worldcentric	BO-SC-U6 6 oz	$48.74	1000	$0.05	Wheatstraw
Bowl To-Go	12 oz	With Lid	MrTakeOutBags.com	14201	$66.63	500	$0.13	Fiber w/Misc Plastic Lid
Bowl To-Go	16 oz		Biomasspackagingstore.com	453-25116	$91.52	500	$0.18	Fiber w/PLA Lining
Bowl To-Go	16 oz	With Lid	MrTakeOutBags.com	14362	$68.95	500	$0.14	Fiber w/Misc Plastic Lid
Bowl To-Go	8 oz	With Lid	MrTakeOutBags.com	14200	$63.52	500	$0.13	Fiber w/Misc Plastic Lid
Bowl To-Go Lid	12 or 16 oz	Lid	Foodpackagingwarehouse.com	PW210GPU500L	$61.67	500	$0.12	Bagasse
Bowl To-Go Lid	12 or 16 oz	Lid	Restaurant Depot	20JL	$18.73	1000	$0.02	Misc Plastic
Bowl To-Go Lid	12 or 17 oz	Lid	Biomasspackagingstore.com	226-L022-500	$21.47	500	$0.04	Bagasse
Bowl To-Go Lid	12 oz		Dong Vinh Restaurant Supply	C-KDL100PP	$35.00	1000	$0.04	Polypropylene #5
Bowl To-Go Lid	12 oz	Lid	Foodservicewarehouse.com	29-6000L	$30.79	500	$0.06	Bagasse

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Bowl To-Go Lid	12 oz	Lid	Foodservicewarehouse.com	DCC 12JL	$18.49	1000	$0.02	Misc Plastic
Bowl To-Go Lid	12, 16, or 32 oz	Lid	Biomasspackagingstore.com	453-25512	$141.17	1000	$0.14	PLA
Bowl To-Go Lid	12, 16, or 32 oz	Lid	Foodservicewarehouse.com	EP-BSCPPLID-L	$68.69	500	$0.14	PLA
Bowl To-Go Lid	12, 16, or 32 oz	Lid	Worldcentric	BOL-CS-12	$118.28	1000	$0.12	PLA
Bowl To-Go Lid	12, 16, or 32 oz	Lid	Worldcentric	BBL-SC-U12	$26.79	500	$0.05	Wheatstraw
Bowl To-Go Lid	12-32 oz	Lid	Restaurant Depot	BSLPP	$35.66	500	$0.07	Misc Plastic
Bowl To-Go Lid	16 oz	Lid	Costco Online	181367	$57.64	500	$0.12	Fiber
Bowl To-Go Lid	16 oz		Dong Vinh Restaurant Supply	C-KDL112PP	$35.00	1000	$0.04	Polypropylene #5
Bowl To-Go Lid	16 oz	Lid	Dong Vinh Restaurant Supply	32JL	$15.00	500	$0.03	Misc Plastic
Bowl To-Go Lid	16 oz	Lid	Smart and Final	31446	$79.80	500	$0.16	Fiber
Bowl To-Go Lid	20 oz		Dong Vinh Restaurant Supply	C-KDL129PP	$38.00	600	$0.06	Polypropylene #5
Bowl To-Go Lid	6 oz	Lid	Biomasspackagingstore.com	453-25508	$91.84	1000	$0.09	PLA
Bowl To-Go Lid	8 or 12 oz	Lid	Costco Online	211007	$49.28	500	$0.10	Fiber
Bowl To-Go Lid	8 or 12 oz	Lid	Dong Vinh Restaurant Supply	75002445	$28.00	500	$0.06	Misc Plastic
Bowl To-Go Lid	8 oz		Dong Vinh Restaurant Supply	C-KDL95PP	$35.00	1000	$0.04	Polypropylene #5
Bowl To-Go Lid	8 oz	Lid	Foodpackagingwarehouse.com	PW210LSOUP8	$173.67	500	$0.35	Fiber
Bowl To-Go Lid	8 oz	Lid	Foodservicewarehouse.com	EP-BSCPPLID-S	$58.69	1000	$0.06	PLA
Bowl To-Go Lid	8 oz	Lid	Restaurant Depot	8BSL-PP	$54.65	1000	$0.05	Misc Plastic
Bowl To-Go Lid	8 oz	Lid	Worldcentric	BOL-CS-8	$76.95	1000	$0.08	PLA
Bowl To-Go Lid	8, 12, or 16 oz	Lid	Restaurant Depot	32JL	$13.53	1000	$0.01	Misc Plastic
Bowl To-Go Lid	8, 12, or 16 oz	Lid	Smart and Final	80476	$23.90	1000	$0.02	Misc Plastic
Bowl To-Go Lid	8, 12, or 16 oz	Lid	Webstaurantstore.com	Dart 20JL	$17.99	1000	$0.02	Misc Plastic
Bowl To-Go Lid	8, 12, or 16 oz	Lid	Costco Online	10432	$9.28	500	$0.02	Misc Plastic
Bowl To-Go Lid	8, 12, or 16 oz	Lid	Dong Vinh Restaurant Supply	20JL	$19.00	1000	$0.02	Misc Plastic
Clamshell	6 in	1 compartment	Biodegradablestore.com	EP-LC6	$57.16	240	$0.24	PLA
Clamshell	6 in	1 compartment	Biomasspackagingstore.com	357-HL66	$74.05	500	$0.15	Bagasse
Clamshell	6 in	1 compartment	Biomasspackagingstore.com	451-N20N	$66.94	250	$0.27	PLA
Clamshell	6 in		Cash&Carry	04807	$34.48	300	$0.11	Fiber
Clamshell	6 in		Cash&Carry	81773	$43.96	500	$0.09	Fiber
Clamshell	6 in	1 compartment	Cash&Carry	YCI81050-5"; 06906	$28.22	375	$0.08	Polystyrene #6
Clamshell	6 in	1 compartment	Cash&Carry	YC181160; 17323	$41.85	500	$0.08	Polystyrene #6
Clamshell	6 in	1 compartment	Costco Online	674252	$9.99	100	$0.10	Fiber
Clamshell	6 in	1 compartment	Costco Online	589182	$37.42	500	$0.07	Misc Plastic
Clamshell	6 in	1 compartment	Costco Online	421576-5 3/8"	$32.23	200	$0.16	PET
Clamshell	6 in	1 compartment	Dong Vinh Restaurant Supply	TN-66	$46.00	400	$0.12	Polypropylene #5 & talc
Clamshell	6 in	1 compartment	Dong Vinh Restaurant Supply	YCN8-0600	$52.00	400	$0.13	Polypropylene #5 & talc
Clamshell	6 in	1 compartment	Dong Vinh Restaurant Supply	CHC6X2	$41.00	500	$0.08	Polystyrene #6
Clamshell	6 in	1 compartment	Dong Vinh Restaurant Supply	YC18-1160	$42.00	500	$0.08	Polystyrene #6

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Clamshell	6 in	1 compartment	Foodpackagingwarehouse.com	HRTD16-5 1/2" UPC:	$66.50	200	$0.33	PET
Clamshell	6 in	1 compartment	Foodpackagingwarehouse.com	HRTD12-5 1/2"	$58.00	200	$0.29	PET
Clamshell	6 in	1 compartment	Foodservicewarehouse.com	29-2001	$63.29	500	$0.13	Bagasse
Clamshell	6 in	1 compartment	Foodservicewarehouse.com	EP-HC6	$75.69	500	$0.15	Bagasse
Clamshell	6 in	1 compartment	Restaurant Depot	BFC66	$36.96	400	$0.09	Fiber
Clamshell	6 in	1 compartment	Restaurant Depot	UPC: 760695024933	$30.97	300	$0.10	Fiber
Clamshell	6 in	1 compartment	Restaurant Depot	UPC: 760695024209	$32.89	300	$0.11	Fiber
Clamshell	6 in	1 compartment	Restaurant Depot	CHC6X2	$15.46	150	$0.10	PET
Clamshell	6 in	1 compartment	Smart and Final	51080	$22.76	200	$0.11	Fiber
Clamshell	6 in	1 compartment	Smart and Final	36264	$46.76	500	$0.09	Polystyrene #6
Clamshell	6 in	1 compartment	Worldcentric	KL-CS-6	$65.55	250	$0.26	PLA
Clamshell	6 in	1 compartment	Worldcentric	TO-SC-U15B	$71.25	500	$0.14	Wheatstraw
Clamshell	8 in	1 compartment	Biodegradablestore.com	EP-LC81	$61.64	160	$0.39	PLA
Clamshell	8 in	3 compartment	Biodegradablestore.com	EP-LC83	$65.49	160	$0.41	PLA
Clamshell	8 in	1 compartment	Biomasspackagingstore.com	226-BX09N-300	$65.18	300	$0.22	Bagasse
Clamshell	8 in	1 compartment	Biomasspackagingstore.com	357-DHL81	$52.21	200	$0.26	Bagasse
Clamshell	8 in	3 compartment	Biomasspackagingstore.com	357-DHL83	$52.21	200	$0.26	Bagasse
Clamshell	8 in	1 compartment	Biomasspackagingstore.com	451-N32N	$70.53	160	$0.44	PLA
Clamshell	8 in	3 compartment	Biomasspackagingstore.com	451-N34N	$72.52	160	$0.45	PLA
Clamshell	8 in	1 compartment	Cash&Carry	81887	$30.40	200	$0.15	Fiber
Clamshell	8 in	3 compartment	Cash&Carry	81909	$30.40	200	$0.15	Fiber
Clamshell	8 in	1 compartment	Cash&Carry	81265	$29.67	200	$0.15	Polystyrene #6
Clamshell	8 in	3 compartment	Cash&Carry	81269	$29.97	200	$0.15	Polystyrene #6
Clamshell	8 in	1 compartment	Costco Online	369887-7.25"	$51.36	200	$0.26	PET
Clamshell	8 in	1 compartment	Costco Online	YCN80801	$49.40	200	$0.25	Polypropylene #5
Clamshell	8 in	3 compartment	Costco Online	YCN80803	$49.40	200	$0.25	Polypropylene #5
Clamshell	8 in	1 compartment	Dong Vinh Restaurant Supply	CBC	$32.00	150	$0.21	PET
Clamshell	8 in	1 compartment	Dong Vinh Restaurant Supply	TN-81	$44.00	200	$0.22	Polypropylene #5 & talc
Clamshell	8 in	3 compartment	Dong Vinh Restaurant Supply	TN-83	$44.00	200	$0.22	Polypropylene #5 & talc
Clamshell	8 in	1 compartment	Dong Vinh Restaurant Supply	YCN8-0801	$49.00	200	$0.25	Polypropylene #5 & talc
Clamshell	8 in	3 compartment	Dong Vinh Restaurant Supply	YCN8-0803	$49.00	200	$0.25	Polypropylene #5 & talc
Clamshell	8 in	1 compartment	Dong Vinh Restaurant Supply	CHC8X2	$42.00	250	$0.17	Polystyrene #6
Clamshell	8 in	3 compartment	Dong Vinh Restaurant Supply	CHC8X2D	$42.00	250	$0.17	Polystyrene #6
Clamshell	8 in	1 compartment	Dong Vinh Restaurant Supply	YC18-1120	$36.00	200	$0.18	Polystyrene #6
Clamshell	8 in	3 compartment	Dong Vinh Restaurant Supply	YC18-1123	$36.00	200	$0.18	Polystyrene #6
Clamshell	8 in	1 compartment	Foodpackagingwarehouse.com	HRTD24-7"	$107.50	200	$0.54	PET
Clamshell	8 in	1 compartment	Foodservicewarehouse.com	29-2003	$40.69	200	$0.20	Bagasse
Clamshell	8 in	1 compartment	Foodservicewarehouse.com	EP-HC81	$51.09	200	$0.26	Bagasse

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Clamshell	8 in	3 compartment	Foodservicewarehouse.com	29-2008	$40.69	200	$0.20	Bagasse
Clamshell	8 in	3 compartment	Foodservicewarehouse.com	EP-HC83	$51.09	200	$0.26	Bagasse
Clamshell	8 in	3 compartment	Restaurant Depot	BFC88	$27.58	150	$0.18	Fiber
Clamshell	8 in	1 compartment	Restaurant Depot	CHC8X1	$39.38	250	$0.16	PET
Clamshell	8 in	3 compartment	Restaurant Depot	CHC8X3	$40.94	1000	$0.04	PET
Clamshell	8 in	3 compartment	Restaurant Depot	CHC8X2D	$38.99	250	$0.16	PET
Clamshell	8 in	1 compartment	Restaurant Depot	TN81	$46.75	100	$0.47	Polypropylene #5
Clamshell	8 in	3 compartment	Restaurant Depot	TN83	$46.75	200	$0.23	Polypropylene #5
Clamshell	8 in	1 compartment	Smart and Final	51078	$39.96	200	$0.20	Fiber
Clamshell	8 in	3 compartment	Smart and Final	51082	$39.96	200	$0.20	Fiber
Clamshell	8 in	1 compartment	Smart and Final	36809	$39.88	200	$0.20	Polystyrene #6
Clamshell	8 in	1 compartment	Worldcentric	KL-CS-8	$103.17	250	$0.41	PLA
Clamshell	8 in	1 compartment	Worldcentric	TO-SC-U85-3-P-8.5"	$82.37	300	$0.27	Wheatstraw
Clamshell	9 in	1 compartment	Biomasspackagingstore.com	357-HL91	$62.25	200	$0.31	Bagasse
Clamshell	9 in	3 compartment	Biomasspackagingstore.com	357-HL93	$62.25	200	$0.31	Bagasse
Clamshell	9 in	1 compartment	Biomasspackagingstore.com	451-N42N	$101.33	150	$0.68	PLA
Clamshell	9 in	1 compartment	Biomasspackagingstore.com	357-HL91	$62.25	200	$0.31	Bagasse
Clamshell	9 in	1 compartment	Cash&Carry	81779	$37.93	200	$0.19	Fiber
Clamshell	9 in	3 compartment	Cash&Carry	81777	$37.93	200	$0.19	Fiber
Clamshell	9 in	1 compartment	Costco Online	674240	$21.87	100	$0.22	Fiber
Clamshell	9 in	3 compartment	Costco Online	674256	$21.87	100	$0.22	Fiber
Clamshell	9 in	1 compartment	Costco Online	589184	$35.28	200	$0.18	Misc Plastic
Clamshell	9 in	1 compartment	Dong Vinh Restaurant Supply	TN-91	$31.00	100	$0.31	Polypropylene #5 & talc
Clamshell	9 in	3 compartment	Dong Vinh Restaurant Supply	TN-93	$31.00	100	$0.31	Polypropylene #5 & talc
Clamshell	9 in	1 compartment	Dong Vinh Restaurant Supply	YCN8-0901	$37.00	120	$0.31	Polypropylene #5 & talc
Clamshell	9 in	3 compartment	Dong Vinh Restaurant Supply	YCN8-0903	$37.00	120	$0.31	Polypropylene #5 & talc
Clamshell	9 in	1 compartment	Dong Vinh Restaurant Supply	CHC9X3	$46.00	200	$0.23	Polystyrene #6
Clamshell	9 in	3 compartment	Dong Vinh Restaurant Supply	CHC9X3D	$46.00	200	$0.23	Polystyrene #6
Clamshell	9 in	1 compartment	Dong Vinh Restaurant Supply	YC18-1110	$47.00	200	$0.24	Polystyrene #6
Clamshell	9 in	3 compartment	Dong Vinh Restaurant Supply	YC18-1113	$47.00	200	$0.24	Polystyrene #6
Clamshell	9 in	1 compartment	Foodservicewarehouse.com	29-2005	$52.29	200	$0.26	Bagasse
Clamshell	9 in	3 compartment	Foodservicewarehouse.com	EP-HC93	$70.39	200	$0.35	Bagasse
Clamshell	9 in	3 compartment	Foodservicewarehouse.com	29-2006	$52.29	200	$0.26	Bagasse
Clamshell	9 in	1 compartment	Foodservicewarehouse.com	EP-HCL91	$84.39	200	$0.42	Bagasse w/PLA lining
Clamshell	9 in	1 compartment	Foodservicewarehouse.com	EP-HC91	$70.39	200	$0.35	Bagasse w/PLA lining
Clamshell	9 in	3 compartment	Foodservicewarehouse.com	EP-HC93	$70.39	200	$0.35	Bagasse w/PLA lining
Clamshell	9 in	3 compartment	Foodservicewarehouse.com	EP-HCL93	$84.39	200	$0.42	Bagasse w/PLA lining
Clamshell	9 in	1 compartment	Foodservicewarehouse.com	EP-LC83	$59.49	160	$0.37	PLA

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Clamshell	9 in	1 compartment	Restaurant Depot	BFC99	$37.52	150	$0.25	Fiber
Clamshell	9 in	1 compartment	Restaurant Depot	UPC: 760695024261	$35.48	150	$0.24	Fiber
Clamshell	9 in	3 compartment	Restaurant Depot	BFC99-3C	$37.52	150	$0.25	Fiber
Clamshell	9 in	3 compartment	Restaurant Depot	UPC: 0760695024278	$35.75	150	$0.24	Fiber
Clamshell	9 in	1 compartment	Restaurant Depot	CHC9X3	$38.86	200	$0.19	PET
Clamshell	9 in	3 compartment	Restaurant Depot	CHC9X3D	$38.86	200	$0.19	PET
Clamshell	9 in	1 compartment	Restaurant Depot	TN91	$29.95	100	$0.30	Polypropylene #5
Clamshell	9 in	3 compartment	Restaurant Depot	TN93	$29.95	100	$0.30	Polypropylene #5
Clamshell	9 in	1 compartment	Smart and Final	51073	$47.96	200	$0.24	Fiber
Clamshell	9 in	3 compartment	Smart and Final	51072	$47.96	200	$0.24	Fiber
Clamshell	9 in	1 compartment	Smart and Final	36258	$43.98	200	$0.22	Polystyrene #6
Clamshell	9 in	1 compartment	Worldcentric	KL-CS-95	$71.99	250	$0.29	PLA
Clamshell	9 in	1 compartment	Worldcentric	TO-SC-U9	$89.49	300	$0.30	Wheatstraw
Clamshell	9 in	3 compartment	Worldcentric	TO-SC-U9T	$89.49	300	$0.30	Wheatstraw
Clamshell	9x6 in	Hoagie	Biodegradablestore.com	EP-LC96	$65.01	240	$0.27	PLA
Clamshell	9x6 in	Hoagie	Biomasspackagingstore.com	357-HL96	$50.94	250	$0.20	Bagasse
Clamshell	9x6 in	Hoagie	Biomasspackagingstore.com	451-N48N	$106.02	250	$0.42	PLA
Clamshell	9x6 in	Hoagie	Cash&Carry	81771	$33.44	250	$0.13	Fiber
Clamshell	9x6 in	Hoagie	Costco Online	673985-6"	$15.28	100	$0.15	Fiber
Clamshell	9x6 in	Hoagie	Dong Vinh Restaurant Supply	TN-96	$49.90	250	$0.20	Polypropylene #5 & talc
Clamshell	9x6 in	Hoagie	Dong Vinh Restaurant Supply	CHC935	$49.00	250	$0.20	Polystyrene #6
Clamshell	9x6 in	Hoagie	Foodservicedirect.com	UFCI81048	$71.75	200	$0.36	Misc Plastic
Clamshell	9x6 in	Hoagie	Foodservicedirect.com	WEPACYCI81048	$80.15	250	$0.32	Misc Plastic
Clamshell	9x6 in	Hoagie	Foodservicedirect.com	UFCI81049	$74.65	250	$0.30	Misc Plastic
Clamshell	9x6 in	Hoagie	Foodservicewarehouse.com	EP-HC96	$62.79	250	$0.25	Bagasse
Clamshell	9x6 in	Hoagie	Foodservicewarehouse.com	EP-LC96	$62.49	240	$0.26	PLA
Clamshell	9x6 in	Hoagie	Restaurant Depot	BFC96	$32.09	200	$0.16	Fiber
Clamshell	9x6 in	Hoagie	Restaurant Depot	UPC: 7060695024285	$33.25	200	$0.17	Fiber
Clamshell	9x6 in	Hoagie	Restaurant Depot	CHC935	$51.04	250	$0.20	PET
Clamshell	9x6 in	Hoagie	Restaurant Depot	TN96	$51.75	250	$0.21	Polypropylene #5
Clamshell	9x6 in	Hoagie	Wasserstrom.com	6000748	$88.06	250	$0.35	PET
Clamshell	9x6 in	Hoagie	Webstaurantstore.com	Dart C99HT1	$22.99	100	$0.23	Misc Plastic
Clamshell	9x6 in	Hoagie	Webstaurantstore.com	433PXT350	$38.20	250	$0.15	Misc Plastic
Clamshell	9x6 in	Hoagie	Webstaurantstore.com	999PXT350	$24.49	125	$0.20	Misc Plastic
Clamshell	9x6 in	Hoagie	Webstaurantstore.com	433PXT395	$27.25	250	$0.11	Misc Plastic
Clamshell	9x6 in	Hoagie	Webstaurantstore.com	999PXT395	$18.49	125	$0.15	Misc Plastic
Clamshell	9x6 in	Hoagie	Worldcentric	TO-SC-UHB	$108.02	500	$0.22	Wheatstraw
Cold Cup	12 oz		Biodegradablestore.com	EP-CR12	$110.87	1000	$0.11	PET

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Cold Cup	12 oz		Biodegradablestore.com	EP-CC12-GS	$106.74	1000	$0.11	PLA
Cold Cup	12 oz		Cash&Carry	31803	$31.61	500	$0.06	PET
Cold Cup	12 oz		Cash&Carry	06905-14oz	$50.97	960	$0.05	Polystyrene #6
Cold Cup	12 oz		Costco In-Store	24588	$10.99	300	$0.04	Fiber
Cold Cup	12 oz		Costco Online	24588	$12.58	300	$0.04	Fiber
Cold Cup	12 oz		Costco Online	555094	$6.79	50	$0.14	PET
Cold Cup	12 oz		Costco Online	474530	$39.64	500	$0.08	PET
Cold Cup	12 oz		Costco Online	490785	$82.34	1000	$0.08	PLA
Cold Cup	12 oz		Costco Online	362897	$37.40	1000	$0.04	Polystyrene #6
Cold Cup	12 oz		Dong Vinh Restaurant Supply	C-K516W	$59.00	1000	$0.06	Fiber
Cold Cup	12 oz		Dong Vinh Restaurant Supply	C-KC12S	$65.00	1000	$0.07	PET
Cold Cup	12 oz		Foodpackagingwarehouse.com	APC12	$109.18	1000	$0.11	PET
Cold Cup	12 oz		Foodservicewarehouse.com	SCC R12NJ	$151.99	2000	$0.08	Fiber
Cold Cup	12 oz		Foodservicewarehouse.com	EP-CC12-GS	$100.99	1000	$0.10	PLA
Cold Cup	12 oz		Foodservicewarehouse.com	EP-CR12	$110.89	1000	$0.11	PET
Cold Cup	12 oz		Goodware Restaurant Supply	098431	$3.99	50	$0.08	Polystyrene #6
Cold Cup	12 oz		Goodware Restaurant Supply	C-KC12S	$3.99	50	$0.08	PET
Cold Cup	12 oz		Restaurant Depot	IPDMS-12 (COKE)	$34.50	1000	$0.03	Fiber
Cold Cup	12 oz		Restaurant Depot	KC12S	$29.50	500	$0.06	PET
Cold Cup	12 oz		Restaurant Depot	#GC12S	$72.15	1000	$0.07	PLA
Cold Cup	12 oz		Restaurant Depot	RK12	$31.34	1000	$0.03	Polystyrene #6
Cold Cup	12 oz		Smart and Final	80379	$86.28	2400	$0.04	Fiber
Cold Cup	12 oz		Smart and Final	80965	$63.60	1000	$0.06	PET
Cold Cup	12 oz		Smart and Final	80942	$91.60	1000	$0.09	PLA
Cold Cup	12 oz		Smart and Final	80956	$49.80	1000	$0.05	Polystyrene #6
Cold Cup	12 oz		Worldcentric	CP-CS-12	$112.58	1000	$0.11	PLA
Cold Cup	16 oz		Biodegradablestore.com	EP-CR16	$124.95	1000	$0.12	PET
Cold Cup	16 oz		Biodegradablestore.com	EP-CC16-GS	$126.66	1000	$0.13	PLA
Cold Cup	16 oz		Cash&Carry	16837	$40.79	600	$0.07	Fiber
Cold Cup	16 oz		Cash&Carry	29958	$64.94	1000	$0.06	Fiber
Cold Cup	16 oz		Cash&Carry	31805	$25.20	500	$0.05	PET
Cold Cup	16 oz		Cash&Carry	54969	$143.83	1000	$0.14	Polystyrene #6
Cold Cup	16 oz		Costco In-Store	24592	$12.99	240	$0.05	Fiber
Cold Cup	16 oz		Costco In-Store	277354- 18oz	$11.49	240	$0.05	Misc Plastic
Cold Cup	16 oz		Costco Online	721765 (model #75616)	$29.40	600	$0.05	Fiber
Cold Cup	16 oz		Costco Online	555104	$8.49	50	$0.17	PET
Cold Cup	16 oz		Costco Online	474680	$44.69	500	$0.09	PET
Cold Cup	16 oz		Costco Online	490787	$94.11	1000	$0.09	PLA

Most locations offer additional products and discounts for bulk purchasing.

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Cold Cup	16 oz		Costco Online	362898	$56.93	1000	$0.06	Polystyrene #6
Cold Cup	16 oz		Dong Vinh Restaurant Supply	C-K512W	$55.00	1000	$0.06	Fiber
Cold Cup	16 oz		Dong Vinh Restaurant Supply	C-KCP16	$45.00	1000	$0.05	Fiber
Cold Cup	16 oz		Dong Vinh Restaurant Supply	C-KC16T	$65.00	1000	$0.07	PET
Cold Cup	16 oz		Foodpackagingwarehouse.com	APC16	$116.93	1000	$0.12	PET
Cold Cup	16 oz		Foodservicewarehouse.com	EP-CC16-GSPK	$75.59	500	$0.15	PLA
Cold Cup	16 oz		Foodservicewarehouse.com	EP-CC16-GS	$119.89	1000	$0.12	PLA
Cold Cup	16 oz		Foodservicewarehouse.com	EP-CR16	$116.59	1000	$0.12	PET
Cold Cup	16 oz		Goodware Restaurant Supply	C-KC16T	$65.95	1000	$0.07	PET
Cold Cup	16 oz		Restaurant Depot	IP DMR-16	$28.72	600	$0.05	Fiber
Cold Cup	16 oz		Restaurant Depot	IPDMR-16 (COKE)	$25.50	600	$0.04	Fiber
Cold Cup	16 oz		Restaurant Depot	KC16S	$29.95	500	$0.06	PET
Cold Cup	16 oz		Restaurant Depot	#GC16S	$82.05	1000	$0.08	PLA
Cold Cup	16 oz		Restaurant Depot	RK16	$41.12	1000	$0.04	Polystyrene #6
Cold Cup	16 oz		Smart and Final	80380	$68.28	1200	$0.06	Fiber
Cold Cup	16 oz		Smart and Final	80964	$73.00	1000	$0.07	PET
Cold Cup	16 oz		Smart and Final	80937	$84.16	800	$0.11	PLA
Cold Cup	16 oz		Smart and Final	80958	$57.80	1000	$0.06	Polystyrene #6
Cold Cup	16 oz		Smart and Final	80290	$9.99	200	$0.05	Polystyrene #6
Cold Cup	16 oz		Worldcentric	CP-CS-16	$134.24	1000	$0.13	PLA
Cold Cup	8 oz		Biodegradablestore.com	EP-CR9 - 9 oz	$93.62	1000	$0.09	PET
Cold Cup	8 oz		Biodegradablestore.com	EP-CC7 - 7 oz	$113.11	2000	$0.06	PLA
Cold Cup	8 oz		Cash&Carry	31800-10 oz	$27.86	500	$0.06	PET
Cold Cup	8 oz		Costco In-Store	740338-9oz	$10.59	360	$0.03	Fiber
Cold Cup	8 oz		Costco Online	555119 - 9oz	$5.99	50	$0.12	PET
Cold Cup	8 oz		Dong Vinh Restaurant Supply	C-KC8	$54.00	1000	$0.05	PET
Cold Cup	8 oz		Foodpackagingwarehouse.com	APC9-9oz	$99.45	1000	$0.10	PET
Cold Cup	8 oz		Foodservicewarehouse.com	SCC R9NJ	$123.99	2000	$0.06	Fiber
Cold Cup	8 oz		Foodservicewarehouse.com	EP-CC9S-GS-9 oz.	$80.39	1000	$0.08	PLA
Cold Cup	8 oz		Foodservicewarehouse.com	EP-CR9-9oz	$93.49	1000	$0.09	PET
Cold Cup	8 oz		Goodware Restaurant Supply	C-KC9-9oz	$3.40	50	$0.07	PET
Cold Cup	8 oz		Restaurant Depot	KC9T-9oz	$57.49	1000	$0.06	PET
Cold Cup	8 oz		Restaurant Depot	KC9OF	$60.90	1000	$0.06	PET
Cold Cup	8 oz		Restaurant Depot	GC7 - 7oz	$56.08	1000	$0.06	PLA
Cold Cup	8 oz		Restaurant Depot	RK9-9oz	$61.62	2500	$0.02	Polystyrene #6
Cold Cup	8 oz		Smart and Final	80378-9oz	$6.79	200	$0.03	Fiber
Cold Cup	8 oz		Smart and Final	80961	$79.80	1000	$0.08	PET
Cold Cup	8 oz		Smart and Final	80954 10 oz	$75.58	1000	$0.08	Polystyrene #6

Most locations offer additional products and discounts for bulk purchasing.

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Cold Cup	8 oz		Smart and Final	80952 7 oz	$55.80	1000	$0.06	Polystyrene #6
Cold Cup	8 oz		Worldcentric	CP-CS-9-9oz	$157.32	2000	$0.08	PLA
Deli Box	6 in	1 compartment	Biomasspackagingstore.com	BioPlus Earth#12-330-	$82.48	200	$0.41	Fiber
Deli Box	6 in	1 compartment	Biomasspackagingstore.com	Bio Pack #8 680-12860	$90.89	300	$0.30	Fiber
Deli Box	6 in		Cash&Carry	Bio-Plus #1; 55475	$51.77	450	$0.12	Fiber
Deli Box	6 in		Cash&Carry	Bio Box #1; 80528	$52.49	450	$0.12	Fiber
Deli Box	6 in	1 compartment	Costco Online	Vitalco #1 Item # 743742	$44.69	450	$0.10	Fiber
Deli Box	6 in		Dong Vinh Restaurant Supply	EcoBox #8 100850	$55.00	300	$0.18	Fiber
Deli Box	6 in	1 compartment	MrTakeOutBags.com	BioPlus Earth#12	$57.76	480	$0.12	Fiber
Deli Box	6 in	1 compartment	MrTakeOutBags.com	BioPlus Earth#8	$79.54	300	$0.27	Fiber
Deli Box	6 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #12-	$58.52	480	$0.12	Fiber
Deli Box	6 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #8-	$79.44	300	$0.26	Fiber
Deli Box	6 in	1 compartment	MrTakeOutBags.com	BioPlus Earth#1	$77.15	450	$0.17	Fiber
Deli Box	6 in	1 compartment	Restaurant Depot	BIOPAK#8	$56.55	300	$0.19	Fiber
Deli Box	6 in	1 compartment	Restaurant Depot	BIOPAK#1-5"	$55.89	400	$0.14	Fiber
Deli Box	6 in	1 compartment	Restaurant Depot	BIOPLUSEARTH#8	$56.05	300	$0.19	Fiber
Deli Box	6 in	1 compartment	Restaurant Depot	BIOPAK#3	$43.23	200	$0.22	Fiber
Deli Box	7 in	1 compartment	Biomasspackagingstore.com	03011	$75.65	200	$0.38	Fiber
Deli Box	8 in		Cash&Carry	Bio-Plus #4; 55479	$42.21	160	$0.26	Fiber
Deli Box	8 in		Cash&Carry	Bio-Plus #3; 55477	$40.93	200	$0.20	Fiber
Deli Box	8 in		Cash&Carry	Bio-Plus #2; 25146	$39.33	200	$0.20	Fiber
Deli Box	8 in		Cash&Carry	Bio Box #2; 80530	$40.29	200	$0.20	Fiber
Deli Box	8 in		Cash&Carry	Bio Pak #3; 31441	$40.90	200	$0.20	Fiber
Deli Box	8 in		Cash&Carry	Bio Pak #4; 31442	$44.06	160	$0.28	Fiber
Deli Box	8 in	1 compartment	Costco Online	Vitalco #3 Item # 743760	$38.22	200	$0.19	Fiber
Deli Box	8 in	1 compartment	Costco Online	Vitalco #2 Item # 743754	$37.64	200	$0.19	Fiber
Deli Box	8 in		Dong Vinh Restaurant Supply	EcoBox #4 11050030	$41.00	160	$0.26	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #11-	$53.79	400	$0.13	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #9-	$70.82	400	$0.18	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #3-	$76.55	400	$0.19	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	Bio-Pak White #5-	$74.46	280	$0.27	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	BioPlus Earth #3-	$70.45	400	$0.18	Fiber
Deli Box	8 in	1 compartment	MrTakeOutBags.com	BioPlus Earth #5-	$76.80	280	$0.27	Fiber
Deli Box	8 in	1 compartment	Restaurant Depot	BIOPAK#2	$43.08	200	$0.22	Fiber
Deli Box	8 in	1 compartment	Restaurant Depot	BIOPAK#3	$43.22	200	$0.22	Fiber
Deli Box	8 in	1 compartment	Restaurant Depot	BIOPLUS#3	$42.21	200	$0.21	Fiber
Deli Box	8 in	1 compartment	Restaurant Depot	BIOPLUS#4	$43.41	160	$0.27	Fiber
Deli Box	8 in	1 compartment	Restaurant Depot	BIOPAK#4	$45.21	160	$0.28	Fiber

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Deli Box	8 in	1 compartment	Smart and Final	BIOPAK#4	$51.60	160	$0.32	Fiber
Deli Box	8 in	1 compartment	Smart and Final	BIOPAK#3	$46.56	200	$0.23	Fiber
Deli Box	8.5 in	1 compartment	Biomasspackagingstore.com	Bio Pack #2 680-12260	$62.27	200	$0.31	Fiber
Deli Box	8.5 in	1 compartment	Biomasspackagingstore.com	Bio Pack #3 680-12360	$64.99	220	$0.30	Fiber
Deli Container	12 oz	Hinged Lid	Cash&Carry	55762	$24.45	200	$0.12	PET
Deli Container	12 oz	Round w/lid	Dong Vinh Restaurant Supply	DN-12	$30.00	250	$0.12	Polypropylene #5
Deli Container	12 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	DLC-012B	$36.00	252	$0.14	Polystyrene #6
Deli Container	12 oz		Goodware Restaurant Supply	DM12	$8.99	25	$0.36	PET
Deli Container	12 oz	Round w/lid	Restaurant Depot	Sunset SC12	$32.29	250	$0.13	Polypropylene #5
Deli Container	12 oz	Round	Restaurant Depot	PK12SC;	$31.42	500	$0.06	Polypropylene #5
Deli Container	12 oz	Round	Restaurant Depot	PK16SC; 049202002740	$29.99	500	$0.06	Polypropylene #5
Deli Container	16 oz	Hinged Lid	Cash&Carry	55764	$26.00	200	$0.13	PET
Deli Container	16 oz	Round	Cash&Carry	07126	$75.59	500	$0.15	Polystyrene #6
Deli Container	16 oz	Round w/lid	Dong Vinh Restaurant Supply	DN-16	$31.00	250	$0.12	Polypropylene #5
Deli Container	16 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	MN-8516B	$29.00	150	$0.19	Polypropylene #5
Deli Container	16 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	DLC-016B	$37.00	252	$0.15	Polystyrene #6
Deli Container	16 oz		Goodware Restaurant Supply	DM16	$8.04	25	$0.32	PET
Deli Container	16 oz	Round w/lid	Restaurant Depot	Sunset SC16	$33.73	250	$0.13	Polypropylene #5
Deli Container	16 oz	Rectangle w/lid	Restaurant Depot	CUBE 815B UPC:	$26.75	120	$0.22	Polypropylene #5
Deli Container	16 oz	Hinged lid	Smart and Final	80934	$31.50	200	$0.16	PET
Deli Container	16 oz	Round-clear	Smart and Final	80941	$104.80	1000	$0.10	Polypropylene #5
Deli Container	24 oz	Round w/lid	Dong Vinh Restaurant Supply	DN-24	$36.00	250	$0.14	Polypropylene #5
Deli Container	24 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	MN-8524B	$30.00	150	$0.20	Polypropylene #5
Deli Container	24 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	DLC-024B	$48.00	252	$0.19	Polystyrene #6
Deli Container	24 oz	Round w/lid	Restaurant Depot	DLC-024	$45.42	252	$0.18	Misc Plastic
Deli Container	24 oz	Hinged lid	Smart and Final	80935	$23.85	200	$0.12	PET
Deli Container	24 oz	Rectangle w/lid	Smart and Final	62237	$59.37	90	$0.66	Polystyrene #6
Deli Container	28 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	MN-9628B	$36.00	150	$0.24	Polypropylene #5
Deli Container	28 oz	Rectangle w/lid	Restaurant Depot	CUBE CR927B UPC:	$28.75	120	$0.24	Polypropylene #5
Deli Container	32 oz	Round	Cash&Carry	02676	$121.26	500	$0.24	Polystyrene #6
Deli Container	32 oz	Round w/lid	Dong Vinh Restaurant Supply	DN-32	$39.00	250	$0.16	Polypropylene #5
Deli Container	32 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	MN-9632B	$37.00	150	$0.25	Polypropylene #5
Deli Container	32 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	DLC-032B	$49.00	252	$0.19	Polystyrene #6
Deli Container	32 oz		Goodware Restaurant Supply	DM32	$15.77	25	$0.63	PET
Deli Container	32 oz	Round w/lid	Restaurant Depot	DLC-032	$47.98	252	$0.19	Misc Plastic
Deli Container	32 oz	Round	Restaurant Depot	PK3T-C; 049202002764	$48.89	500	$0.10	Polypropylene #5
Deli Container	38 oz	Rectangle w/lid	Dong Vinh Restaurant Supply	MN-9638B	$38.00	150	$0.25	Polypropylene #5
Deli Container	6 oz	Round	Restaurant Depot	PK6SC	$25.75	500	$0.05	Polypropylene #5

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Deli Container	7 in	Rectangle w/lid	Dong Vinh Restaurant Supply	J-8510	$59.00	400	$0.15	Polystyrene #6
Deli Container	8 in	Rectangle w/lid	Dong Vinh Restaurant Supply	J-8520	$69.00	400	$0.17	Polystyrene #6
Deli Container	8 in	Rectangle w/lid	Goodware Restaurant Supply	J-8520	$64.49	400	$0.16	Polystyrene #6
Deli Container	8 oz	Hinged Lid	Cash&Carry	55770	$12.59	100	$0.13	PET
Deli Container	8 oz	Round	Cash&Carry	07103	$58.70	500	$0.12	Polystyrene #6
Deli Container	8 oz	Round w/lid	Dong Vinh Restaurant Supply	DN-08	$28.00	250	$0.11	Polypropylene #5
Deli Container	8 oz		Goodware Restaurant Supply	DM8	$11.44	50	$0.23	PET
Deli Container	8 oz	Round w/lid	Goodware Restaurant Supply	Prime Source	$39.22	500	$0.08	Polypropylene #5
Deli Container	8 oz	Round w/lid	Restaurant Depot	Sunset SC8	$30.16	250	$0.12	Polypropylene #5
Deli Container	8 oz	Round	Restaurant Depot	PK8SC; 049202002764	$26.76	500	$0.05	Polypropylene #5
Deli Container	8 oz	Hinged lid	Smart and Final	80933	$28.12	200	$0.14	PET
Deli Container	8 oz	Round-clear	Smart and Final	80940	$86.80	1000	$0.09	Polypropylene #5
Deli Container	9 in	Rectangle w/lid	Dong Vinh Restaurant Supply	J-8525	$69.00	300	$0.23	Polystyrene #6
Deli Container	9 in	Rectangle w/lid	Goodware Restaurant Supply	J-8525	$67.19	300	$0.22	Polystyrene #6
Deli Container Lid	6-32 oz	Lid	Smart and Final	80943	$71.80	1000	$0.07	Polypropylene #5
Deli Container Lid	8-32 oz	Lid	Cash&Carry	07152	$47.73	500	$0.10	Polystyrene #6
Deli Container Lid	8-32 oz	Lid	Goodware Restaurant Supply	LG8R	$6.95	50	$0.14	PET
Deli Container Lid	8-32 oz	Lid	Restaurant Depot	00049202003235	$18.88	500	$0.04	Polypropylene #5
Deli Container Lid	8-32 oz	Lid	Restaurant Depot	00049202005512	$27.77	500	$0.06	Polyethylene
Hot Cup	12 oz		Biodegradablestore.com	EP-BRHC12-EW	$105.57	1000	$0.11	Fiber
Hot Cup	12 oz		Biodegradablestore.com	EP-BHC12-WA	$107.46	1000	$0.11	Fiber w/PLA Lining
Hot Cup	12 oz		Cash&Carry	56670	$49.80	1000	$0.05	Fiber
Hot Cup	12 oz		Cash&Carry	02754	$49.80	1000	$0.05	Fiber
Hot Cup	12 oz		Cash&Carry	56211	$49.80	1000	$0.05	Fiber
Hot Cup	12 oz		Costco In-Store	974307	$12.99	160	$0.08	Fiber
Hot Cup	12 oz		Costco Online	555080	$7.49	50	$0.15	Fiber
Hot Cup	12 oz		Costco Online	722231	$30.58	600	$0.05	Fiber
Hot Cup	12 oz		Costco Online	505490	$82.34	1000	$0.08	Fiber w/PLA Lining
Hot Cup	12 oz		Dong Vinh Restaurant Supply	C-K512W	$55.00	1000	$0.06	Fiber
Hot Cup	12 oz		Foodpackagingwarehouse.com	SB12W	$45.00	1000	$0.05	Fiber
Hot Cup	12 oz		Foodservicewarehouse.com	DIX 5342CD	$130.99	1000	$0.13	Fiber w/PE coating
Hot Cup	12 oz		Foodservicewarehouse.com	EP-BHC12-WA	$101.09	1000	$0.10	Fiber w/PLA Lining
Hot Cup	12 oz		Restaurant Depot	EarthDay 12BPCE	$70.00	1000	$0.07	Fiber
Hot Cup	12 oz		Restaurant Depot	IPDMS-12RDWN	$38.21	1000	$0.04	Fiber
Hot Cup	12 oz		Restaurant Depot	IPSMR-12-WH	$28.35	600	$0.05	Fiber
Hot Cup	12 oz		Smart and Final	39582	$61.08	600	$0.10	Fiber w/PE coating
Hot Cup	12 oz		Worldcentric	CU-PA-12	$104.54	1000	$0.10	Fiber
Hot Cup	16 oz		Biodegradablestore.com	EP-BRHC16-EW	$125.61	1000	$0.13	Fiber

Most locations offer additional products and discounts for bulk purchasing.

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City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Hot Cup	16 oz		Biodegradablestore.com	EP-BHC16-WA	$125.55	1000	$0.13	Fiber w/PLA Lining
Hot Cup	16 oz		Cash&Carry	02756	$62.40	1000	$0.06	Fiber
Hot Cup	16 oz		Cash&Carry	56668	$62.40	1000	$0.06	Fiber
Hot Cup	16 oz		Cash&Carry	13938	$62.40	1000	$0.06	Fiber
Hot Cup	16 oz		Costco In-Store	976456	$13.49	140	$0.10	Fiber
Hot Cup	16 oz		Costco Online	555085	$9.99	50	$0.20	Fiber
Hot Cup	16 oz		Costco Online	599674	$78.99	500	$0.16	Fiber w/PE coating
Hot Cup	16 oz		Costco Online	360873	$99.99	1000	$0.10	Fiber w/PLA Lining
Hot Cup	16 oz		Dong Vinh Restaurant Supply	C-K5116W	$59.00	1000	$0.06	Fiber
Hot Cup	16 oz		Dong Vinh Restaurant Supply	31651	$69.00	1000	$0.07	Fiber
Hot Cup	16 oz		Foodpackagingwarehouse.com	SB16W	$50.00	1000	$0.05	Fiber
Hot Cup	16 oz		Foodservicewarehouse.com	EP-BHC10-GS-10oz	$94.59	1000	$0.09	Fiber w/PLA Lining
Hot Cup	16 oz		Foodservicewarehouse.com	EP-BHC16_GS	$117.39	1000	$0.12	Fiber w/PLA Lining
Hot Cup	16 oz		Restaurant Depot	EarthDay 16BPCE	$85.93	1000	$0.09	Fiber
Hot Cup	16 oz		Restaurant Depot	IPDMR16RD "Wind"	$28.72	600	$0.05	Fiber
Hot Cup	16 oz		Restaurant Depot	IPSMR-16-WH	$35.36	600	$0.06	Fiber
Hot Cup	16 oz		Smart and Final	80388	$45.20	500	$0.09	Fiber
Hot Cup	16 oz		Smart and Final	39584	$71.28	600	$0.12	Fiber w/PE coating
Hot Cup	16 oz		Worldcentric	CU-PA-16	$116.00	1000	$0.12	Fiber
Hot Cup	8 oz		Biodegradablestore.com	EP-BHC10-WA - 10 oz	$101.37	1000	$0.10	Fiber w/PLA Lining
Hot Cup	8 oz		Cash&Carry	02752	$39.40	1000	$0.04	Fiber
Hot Cup	8 oz		Cash&Carry	56666	$39.40	1000	$0.04	Fiber
Hot Cup	8 oz		Costco In-Store	974319	$10.49	160	$0.07	Fiber
Hot Cup	8 oz		Costco Online	Item # 721792; Model #	$26.22	600	$0.04	Fiber
Hot Cup	8 oz		Costco Online	360871	$70.29	1000	$0.07	Fiber w/PLA Lining
Hot Cup	8 oz		Foodpackagingwarehouse.com	SB08W	$35.00	1000	$0.04	Fiber
Hot Cup	8 oz		Foodservicewarehouse.com	EP-BHC8-WA; EP-BHC8-	$79.39	1000	$0.08	Fiber w/PLA Lining
Hot Cup	8 oz		Restaurant Depot	IPSMR-8-SOHO	$22.23	600	$0.04	Fiber
Hot Cup	8 oz		Restaurant Depot	IPSMR-8-WH	$22.23	600	$0.04	Fiber
Hot Cup	8 oz		Restaurant Depot	EarthDay 10BPCE-10oz	$70.06	1000	$0.07	Fiber
Hot Cup	8 oz		Smart and Final	80413	$59.60	1000	$0.06	Fiber
Hot Cup	8 oz		Smart and Final	80357	$68.20	1000	$0.07	Fiber
Hot Cup	8 oz		Smart and Final	39580	$50.88	600	$0.08	Fiber w/PE coating
Hot Cup	8 oz		Worldcentric	CU-PA-8	$82.37	1000	$0.08	Fiber
Plate	7 in		Cash&Carry	22646-6"	$49.46	1000	$0.05	Bagasse
Plate	7 in		Cash&Carry	07318-6"	$38.53	900	$0.04	Misc Plastic
Plate	7 in		Costco In-Store	128163-6 7/8"	$11.99	300	$0.04	Fiber
Plate	7 in		Costco Online	285705-6"	$65.79	1000	$0.07	Bagasse

Most locations offer additional products and discounts for bulk purchasing.

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Plate	7 in		Costco Online	967877-6 3/4"	$13.87	300	$0.05	Fiber
Plate	7 in		Costco Online	554815-6"	$32.99	500	$0.07	Fiber
Plate	7 in		Costco Online	452997-6"	$14.11	1000	$0.01	Fiber
Plate	7 in		Dong Vinh Restaurant Supply	RNN-06-6"	$32.00	100	$0.32	Bagasse
Plate	7 in		Dong Vinh Restaurant Supply	RNN-07	$39.00	100	$0.39	Bagasse
Plate	7 in		Foodservicewarehouse.com	EP-P016-6"	$57.39	1000	$0.06	Bagasse
Plate	7 in		Foodservicewarehouse.com	24-3001	$105.99	1000	$0.11	Fiber/Bamboo
Plate	7 in		Goodware Restaurant Supply	Unknown-6"	$1.98	100	$0.02	Fiber
Plate	7 in		Restaurant Depot	UPC: 0760695024292	$43.18	1000	$0.04	Fiber
Plate	7 in		Restaurant Depot	UPC: 0760695024384	$43.19	1000	$0.04	Fiber
Plate	7 in		Restaurant Depot	81206-6"	$46.83	1000	$0.05	Misc Plastic
Plate	7 in		Smart and Final	47427	$2.29	30	$0.08	Bagasse
Plate	7 in		Smart and Final	01545-6"	$1.99	100	$0.02	Fiber
Plate	7 in		Smart and Final	36330-6 3/4"	$7.49	125	$0.06	Fiber
Plate	7 in		Smart and Final	07318	$3.99	75	$0.05	Polystyrene #6
Plate	7 in		Worldcentric	PL-SC-U7	$71.25	1000	$0.07	Wheatstraw
Plate	9 in		Cash&Carry	19978	$31.57	500	$0.06	Fiber
Plate	9 in		Cash&Carry	06395	$59.21	500	$0.12	Misc Plastic
Plate	9 in		Costco In-Store	994311- 8 1/2"	$14.99	276	$0.05	Fiber
Plate	9 in		Costco In-Store	18695-8 3/4"	$11.09	225	$0.05	Fiber
Plate	9 in		Costco Online	500022	$66.79	500	$0.13	Bagasse
Plate	9 in		Costco Online	555128-10"	$10.99	50	$0.22	Bagasse
Plate	9 in		Costco Online	17521	$21.75	1200	$0.02	Fiber
Plate	9 in		Costco Online	599677	$20.39	1000	$0.02	Fiber
Plate	9 in		Dong Vinh Restaurant Supply	RNN-901	$33.00	500	$0.07	Bagasse
Plate	9 in		Foodservicewarehouse.com	29-3004	$45.29	500	$0.09	Bagasse
Plate	9 in		Foodservicewarehouse.com	DIX 709902	$42.19	1000	$0.04	Fiber
Plate	9 in		Foodservicewarehouse.com	DCC 6PWF-6"	$71.89	1000	$0.07	Misc Plastic
Plate	9 in		Foodservicewarehouse.com	DCC 9PWF	$138.99	500	$0.28	Misc Plastic
Plate	9 in		Restaurant Depot	UPC: 0760695024308	$40.80	500	$0.08	Fiber
Plate	9 in		Restaurant Depot	UPC: 0760695024391	$40.80	500	$0.08	Fiber
Plate	9 in		Restaurant Depot	54790	$17.96	1000	$0.02	Fiber
Plate	9 in		Restaurant Depot	81209	$49.19	500	$0.10	Misc Plastic
Plate	9 in		Restaurant Depot	81409	$52.53	500	$0.11	Misc Plastic
Plate	9 in		Smart and Final	47426	$2.89	24	$0.12	Bagasse
Plate	9 in		Smart and Final	29867	$7.99	500	$0.02	Fiber
Plate	9 in		Smart and Final	01595	$2.75	100	$0.03	Fiber
Plate	9 in		Smart and Final	29869	$4.99	150	$0.03	Fiber

Most locations offer additional products and discounts for bulk purchasing.

City of San Jose 2014 EPS Alternative Product Pricing

Product Type	Standard Sizes	Style	Vendor Name	(if different than standard size)	2014 Price	2014 Units	2014 Unit Price*	Material Type
Plate	9 in		Smart and Final	36332- 8 3/4"	$7.99	125	$0.06	Fiber
Plate	9 in		Smart and Final	07317-8 7/8"	$9.49	75	$0.13	Polystyrene #6
Plate	9 in		Worldcentric	PL-SC-U9	$112.58	1000	$0.11	Wheatstraw

ecomaine

Owner Communities
Bridgton
Cape Elizabeth
Casco
Cumberland
Falmouth
Freeport
Gorham
Gray
Harrison
Hollis
Limington
Lyman
North Yarmouth
Ogunquit
Portland
Pownal
Scarborough
South Portland
Waterboro
Windham
Yarmouth

Associate Members
Baldwin
Hiram
Naples
Parsonsfield
Porter
Saco
Standish

Contract Members
Andover
Cornish
Eliot
Greenland, NH
Hampton, NH
Jay
Kittery
Limerick
Livermore Falls
Manchester
Monmouth
Newington, NH
North Haven
Old Orchard Beach
Poland
Readfield
Sanford
Stockton Springs
Wayne

June 4, 2013

Mr. Troy Moon
Solid Waste Manager
City of Portland
55 Portland Street
Portland, ME 04101

Dear Troy:

You inquired about what challenges we might be faced with by adding polystyrene foam to our single sort recycling program. I offer the following feedback regarding the challenges associated with recycling polystyrene foam:

- Shipping baled polystyrene foam material is very inefficient due to the weight and density. Baling and/or densification of the polystyrene foam could be a challenge and an added cost. You wouldn't want to ship this material very far to market.
- The marketability of recycling polystyrene foam materials is very limited. Markets would need to be identified and anticipated scrap revenues would need to be determined. Market specifications would also need to be researched to ensure that markets would be willing to accept some residue on the foam containers. There has been very little interest from potential buyers of polystyrene foam and this is a significant concern for the industry.
- We take plastic, metal and glass containers. There would need to be an extensive educational component with polystyrene foam to differentiate foam cups, foam peanuts, foam packaging, clamshells, etc.
- Unlike most of the other plastic, foam easily breaks apart and becomes difficult to manage when in tiny pieces. In comparison, most plastic containers stay intact even when squashed by a loader wheel.
- Sorting of small pieces of foam would be challenging in the MRF. In particular, foam peanuts and broken pieces of foam would go everywhere.
- Collection of polystyrene foam from the source is inefficient without significant compaction or densification.
- Additional equipment would be needed to process polystyrene foam.

This outlines our primary concerns with recycling polystyrene foam. Please feel free to contact me if you have any questions.

Sincerely,

Kevin H. Roche
General Manager

cc: John Morin

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

GAIL FARBER, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

September 21, 2010

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

29 SEPTEMBER 21, 2010

Sachi A. Hamai
SACHI A. HAMAI
EXECUTIVE OFFICER

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012

Dear Supervisors:

EXPANDED POLYSTYRENE FOOD CONTAINERS
(ALL SUPERVISIORIAL DISTRICTS)
(3 VOTES)

SUBJECT

This action is to restrict the purchase and use of expanded polystyrene food containers at County operations, effective 60 days following this Board action.

IT IS RECOMMENDED THAT YOUR BOARD:

1. Adopt a prohibition on the purchase and use of expanded polystyrene food containers, within 60 days following this Board action to the extent not already initiated, at County facilities, County offices, County-managed concessions, and by commercial food and beverage suppliers at County permitted events and County-sponsored events, with exceptions to allow additional time as specified and discussed below for the Chief Executive Office, Sheriff, and Departments of Health Services, Probation, Community and Senior Services, and Beaches and Harbors.

2. Direct the County Office of Sustainability, Internal Services Department, and Department of Public Works to help educate departments on environmentally-friendly alternatives to expanded polystyrene food containers and to assist departments with their choices of alternatives.

3. Direct the Internal Services Department, in consultation with County Counsel and the Department of Public Works, to develop and incorporate language in future departmental food services agreements regarding the prohibition on expanded polystyrene food containers and substitution of alternative products, as applicable.

CHAPTER 2

OVERVIEW OF EXPANDED POLYSTYRENE

Overview

Polystyrene, the polymer used to create EPS, was developed in 1938. EPS products were produced after 1944 and used as packaging material. After fast food and take-out restaurants became more commonplace in the 1950's and 1960's, EPS food packaging containers became more prevalent.

History of Expanded Polystyrene (EPS)

1944: EPS first used as packaging material.

1960's: Fast food restaurants begin using EPS for food containers.

1987: City of Berkeley, CA bans the use of EPS food containers at restaurants and other retail food establishments.

1988: Suffolk County, NY bans the use of EPS for food containers in restaurants and other retail food establishments.

1989 The U.S. Department of Interior banned EPS food containers at its Washington, DC headquarters.

1990: McDonald's begins to phase out EPS food containers nationwide.

2004: The California Integrated Waste Management Board issues a report which finds that public education efforts need to be improved to deliver a consistent litter message, litter studies are needed to determine how to best handle the litter problem, and biodegradable alternatives to EPS containers need to be tested.

2005: City of Malibu bans the use of polystyrene food containers (Type #6 plastic, which includes EPS) citywide.

2006: City of Santa Monica bans the use of polystyrene food containers (Type #6 plastic, which includes EPS) citywide. Ordinance took effect February 2008.

2007: City of Calabasas bans the use of polystyrene food containers (Type #6 plastic, which includes EPS) citywide. Ordinance took effect March 2008.

How Is EPS Manufactured?

Plastic resin is created from long chemical chains called polymers, commonly extracted from petroleum and natural gas processing. The main polymer used, styrene, is treated with a polymerization indicator to convert it to polystyrene. Once the polymer chain is at the correct length, terminating agents are introduced to stop the reaction. The results are a chain of beads which are cleaned. The beads are melted down and a blowing agent is added to extrude the beads, which are reheated, expanded, and cooled. After cooling, the beads are fed into a mold of the desired shape.

How is EPS Recycled?

A survey of waste haulers and materials recovery facilities (MRFs) found that the overwhelming majority of haulers and facilities do not accept EPS food containers from curbside recycling. MRFs separate materials delivered using a variety of mechanical and manual sorting systems. Their main objective is to maximize diversion of recyclables from the waste stream, while reducing cost and maximizing revenue from those materials targeted for recovery. The most commonly recovered materials include some plastic containers, paper, aluminum cans, and cardboard because they are easy to collect, have an available market, and provide the most revenue without costly specialized sorting machinery. Interviews and site visits of these recovery and recycling facilities revealed that EPS *product packaging* is targeted for recovery; however, EPS *food containers are not targeted for recovery*, but instead taken to landfills for the following reasons:

- EPS *food containers* have high contamination rates from food and may contaminate other recyclables as well. Additionally, EPS *food containers* are contaminated when they come into contact with items in the recycling collection bin. EPS *food containers* that are contaminated cannot be efficiently recycled.
- EPS *food containers* are smaller than EPS product packaging (e.g., for TVs, stereos, etc.), and tend to break up into smaller pieces when handled by machinery, making collection of EPS challenging.
- It is not currently cost efficient to recycle EPS *food containers* as the market for this material is weak, largely due to contamination issues coupled with the relative cost to collect, clean, and densify these materials.

The national recycling rate for all EPS products (which includes product packaging and food containers) is only 0.2 percent.[8] Since food containers are even more challenging to collect and recycle, it is assumed that the 0.2 percent recycling rate is mostly due to product packaging and that the recycling rate for food containers is virtually nonexistent. Very recently, a method has been developed for the separate collection and aggregation of source separated EPS food packaging containers for recycling. In order to be successful, EPS users must have significant quantities of uniform EPS food

[8] "Use and Disposal of Polystyrene in California," California Integrated Waste Management Board, 2004. (http://www.ciwmb.ca.gov/Publications/Plastics/43204003.doc). EPS food containers may have a lower overall rate due to additional challenges of collecting and recycling these materials.

packaging containers that can be relatively clean and entirely separated from other materials for collection. In certain applications this system can provide for the collection and recycling of EPS food packaging containers.

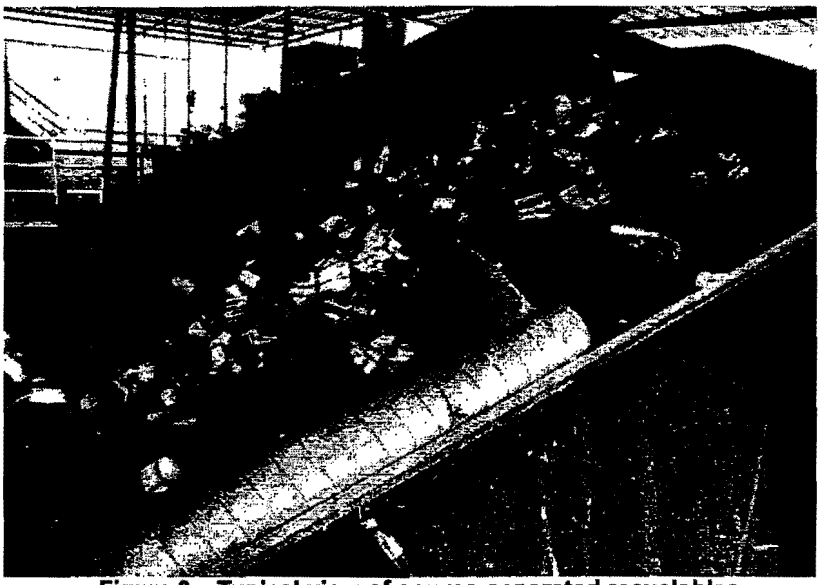

Figure 3 – Typical view of source-separated recyclables traveling along a sorting conveyor belt at a recycling facility

EPS Usage Information

Below is a table summarizing consumption, disposal and recycling rates of EPS in California. Rates for Los Angeles (countywide and unincorporated) are extrapolated based on population.

Table 1 – Expanded Polystyrene Usage Statistics

Annual EPS Consumption Rate	
California	56,637 tons
Countywide	15,858 tons
Unincorporated County area	1,586 tons
Annual Rate of Disposal at Landfills	
California	45,000 tons
Countywide	12,000 tons
Unincorporated County area	1,200 tons
Percentage of Overall Disposal Waste Stream	0.12 percent by weight
Annual Rate of Recycling	

National	0.2 percent[9]

Do County Departments Use EPS Food Containers?

In order to determine possible impacts to County departments, DPW distributed a questionnaire in September of 2007 to all County departments assessing current usage of EPS food containers at County operations, including cafeterias and food service provided at County offices. In coordination with the Internal Services Department, usage information was gathered and compiled in Table 2 below. Only seven departments indicated any substantial use of EPS food containers. A complete summary of responses from all departments and a sample questionnaire are included in Appendix D.

Table 2 -- Use of EPS Food Containers by County Departments and Agencies

Agricultural Commission/Weights and Measures	**No**	
Alternate Public Defender	**No**	
Animal Care and Control	**No**	
Auditor-Controller	**No**	
Beaches and Harbors	**No**	
Board of Supervisors	**No**	
Chief Executive Office	**Yes**	500-1,000 units per year
Chief Information Office	**No**	
Child Support Services	**No Response**	
Children and Family Services	**No**	
Commission on Human Relations	**Yes**	5,000 cups, 2,000 plates per year
Community and Senior Services	**Yes**	49,000 trays, 24,000 bowls, 47,000 cups per year
Community Development Commission	**No**	
Consumer Affairs	**Minimal**	Used for special events only

[9] Ibid. Based on recycling rate of all polystyrene food containers; EPS food containers may have a lower overall rate due to additional challenges of collecting and recycling these materials.

Coroner	**No Response**	
County Counsel	**No**	
District Attorney	**No Response**	
Fire Department	**Yes**	72,000 cups per year
Health Services	**Yes**	1.6 million cups per year
Human Resources	**No**	
Internal Services Department	**No**	
Mental Health	**Minimal**	Used to educate consumers on how to cook and prepare meals
Military and Veterans Affairs	**No Response**	
Museum of Art	**No**	
Natural History Museum	**No**	
Office of Affirmative Action Compliance	**No**	
Office of Public Safety	**No**	
Office of Small Business	**No Response**	
Office of the Assessor	**Minimal**	Used for special events only
Ombudsman	**No**	Phased out the use of EPS
Parks and Recreation	**Yes**	Used at concession stands, exact figures unknown
Probation	**No**	Phased out EPS in mid 2008
Public Defender	**No**	
Public Health	**No Response**	
Public Library	**No Response**	
Public and Social Services	**No Response**	
Public Works	**Minimal**	10,000 cups, 3,800 other containers per year. Phases out all EPS food containers Earth Day (April) 2008
Regional Planning	**No**	
Registrar-Recorder/County Clerk	**No**	
Sheriff	**Yes**	65,000 24oz. cups; 4 million 8oz. cups; 100,000 food containers; and 500,000 trays per year

Treasurer & Tax Collector	**No**	

How is EPS Managed in Los Angeles County Jurisdictions?

Out of 88 cities within the County, 19 indicated that they have a curbside EPS collection program. A survey of waste haulers and materials recovery facilities (MRFs) found that the overwhelming majority of haulers and facilities do not accept EPS food containers from curbside recycling. MRFs separate materials delivered using a variety of mechanical and manual sorting systems. Their main objective is to maximize diversion of recyclables from the waste stream, while reducing cost and maximizing revenue from those materials targeted for recovery. The most commonly recovered materials include paper, aluminum cans, cardboard, and certain plastic containers, since these particular materials are easy to collect, have an available market, and provide the most revenue without costly specialized sorting machinery. Interviews and site visits of these recovery and recycling facilities revealed that while in some cases EPS *product packaging* is targeted for recovery, EPS *food containers are not targeted for recovery*, but instead primarily disposed, for the following reasons:

- EPS *food containers* have high contamination rates from food and may contaminate other recyclables as well. Additionally, EPS *food containers* are contaminated when they come into contact with items in the recycling collection bin. EPS *food containers* that are contaminated cannot be efficiently recycled at traditional recycling facilities.
- EPS *food containers* are smaller than EPS product packaging (e.g., for TVs, stereos, etc.), and tend to break up into smaller pieces when handled by machinery, making collection of EPS challenging.
- It is not currently cost efficient to recycle EPS *food containers* as the market for this material is weak, largely due to contamination issues coupled with the relative cost to collect, clean, and densify these materials.

The national recycling rate for all EPS products (which includes product packaging and food containers) is only 0.2 percent. Since food containers are even more challenging to collect and recycle, it is assumed that the 0.2 percent recycling rate is mostly due to product packaging and that the recycling rate for food containers is virtually nonexistent. Very recently, a method has been developed for the separate collection and aggregation of source separated EPS food packaging containers for recycling. In order to be successful, EPS users must have significant quantities of uniform EPS food packaging containers that can be relatively clean and entirely separated from other materials for collection. In certain applications this system can provide for the collection and recycling of EPS food packaging containers.

Legislative Information

Within the past several years, the State legislature has advanced a handful of bills dealing directly with EPS food containers. These bills have dealt with limiting and

prohibiting the distribution of EPS food containers at State facilities, as well as conducting studies dealing with the potential impacts of EPS. Below is a summary of each bill.

AB 904 (Feuer) - Amended 1-29-08, Died in Committee

This bill would prohibit a take-out food establishment from distributing single use food service packaging unless the packaging is either compostable or recyclable. The Board of Supervisors voted to support this bill.

AB 820 (Kamette) - Amended 4-09-07, Died in Committee

This bill would prohibit a State facility from selling, possessing, or distributing EPS food containers after January 1, 2009. State agencies would be directed to require each prospective contractor to certify that it will not sell, possess, or distribute an EPS food container at a State facility. The Board of Supervisors voted to support this bill.

AB 1866 (Kamette) - Amended 5-01-06, Died in Committee

This bill would prohibit State facilities from selling, possessing or distributing EPS food containers, with certain exemptions.

SB 1127 (Kamette) - Chaptered 10-01-01

This bill required the California Integrated Waste Management Board to prepare a study on the use and disposal of EPS in the state and submit a report to the Governor and the Legislature. The report, entitled "Use and Disposal of Polystyrene in California," can be found online at www.ciwmb.ca.gov/Publications/Plastics/43204003.doc.

COUNCIL AGENDA: 01-24-12
ITEM: 7.1

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: **TRASH LOAD REDUCTION PLAN**

DATE: January 3, 2012

Approved

Date 1/6/12

RECOMMENDATION

1. Authorize submittal of the City's Short Term Trash Load Reduction Plan to the San Francisco Bay Regional Water Quality Control Board in conformance with the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (Stormwater Permit) requirement, pursuant to the Federal Clean Water Act;

2. Direct staff to provide an update to the Transportation and Environment Committee in 2013 on the status of the City's efforts in attaining the Stormwater Permit's required trash reduction goals and potential trash reduction actions to be considered for attaining the Stormwater Permit's long term trash reduction goals of 70 percent by 2017 and 100 percent by 2022; and

3. Direct staff to take the following actions regarding polystyrene foam food service ware:

    a. Actively support a regional approach for countywide initiatives to reduce polystyrene foam food service ware litter as recommended by the Santa Clara County Recycling and Waste Reduction Commission;

    b. Support legislation that would implement a state-wide program that would significantly reduce the use of polystyrene foam food service ware for the purposes of reducing litter from this source; and

    c. Return to the Transportation and Environment Committee in 2013 with options that move the City toward eliminating polystyrene foam food ware litter including program components that address key stakeholder concerns, programmatic options that would minimize impacts of a potential prohibition, and any practicable alternatives and partnerships that would achieve the litter reduction goals of the Municipal Regional Stormwater Permit.

using non-EPS food ware some period of time after the ordinance took effect on larger restaurants. Issues to be considered with this approach include:

1. How many tiers of restaurants are to be phased-in and how is each tier defined?
2. What is the appropriate period of time between phases?
3. How should phases be triggered?

As part of the annual report on the Environmentally Preferable Procurement Policy (EP3) to be submitted to the T&E Committee and City Council in February 2012, Council will be asked to consider an amendment to the EP3 to formalize the current Purchasing practice to not stock or provide EPS products and to expand the prohibition to cover vendors and other users of City facilities as well as vendors at City events.

Hardship Exemption
While Hardship Exemptions are included in most local ordinances that ban EPS, there is no established criteria for evaluating hardship claims. Cities surveyed stated that they handle hardship exemption requests on a case-by-case basis. Use of hardship exemptions to address the needs of a whole class of restaurants (i.e., small or family owned) has not been contemplated by any of the surveyed cities. Cities with hardship provisions have reported that very few restaurants have applied for the exemption. Surplus inventories of EPS have been a common issue for cities when they first implement an EPS ban. Many of these cities have expressed a willingness to work with their restaurants, allowing them to draw down their inventories before having to switch over to non-EPS alternatives.

Group Purchasing
Some small businesses may have limited access to bulk suppliers and discounted purchasing prices. In order to increase access to more competitive pricing for alternative products, some cities have assisting with establishing purchasing cooperatives to help small businesses purchase alternative products in bulk or at discounted prices during and after establishment of an EPS prohibition.

GreenTown Los Altos, a grassroots environmental group in the City of Los Altos, has established a cooperative through which businesses can take advantage of a 25% discount on purchases over $250. GreenTown Los Altos makes these discounted prices available Countywide, including the San José restaurant community. Staff has reviewed the pricing for the most common take-out packaging items and finds that GreenTown Los Altos is very competitive and in one key product category, hinged "clamshell" containers, their prices are lower than the quoted cash-and-carry prices used in the staff analysis.

Recycling of EPS

Recycling food contaminated EPS is being done on a very limited basis. DART Container Corporation, an active participant in the GreenToGo stakeholder process, provided the name of a single Material Recovery Facility (MRF) as the "best case" of a California company collecting food contaminated EPS for recycling. Burrtec Waste & Recycling Services provides recycling services to portions of Southern California, including the desert regions and portions of San

Bernardino and Los Angeles Counties. The marketing manager of the Burrtec recycling facility in Fontana reported that from December 2010 to October 2011, Burrtec recovered and marketed 106 tons of EPS from the recycling stream. Staff from cities served by Burrtec have reported that most of this material was EPS packaging, not EPS foam food service ware.

A limited number of cities in the Los Angeles area collect and process some food contaminated EPS. However, based on staff research less than half of the food contaminated EPS collected is actually recycled. At the December 5, 2011, T&E Committee meeting, the ACC stated that there are 32 California communities collecting EPS food ware for recycling. A November 2011 County of Los Angeles staff report on Expanded Polystyrene Food Containers in LA County indicates that 15 of these 32 communities are collecting the material but are currently landfilling it because the material too contaminated for recycling. Another eight of the 32 communities are no longer collecting EPS food service ware due to contamination issues. Only seven of the 32 communities are currently collecting the material for recycling.

Food contaminated EPS is not recycled in the Bay Area. Staff has contacted most of the Material Recovery Facilities (MRFs) in the San Francisco Bay Area and found only a few accepting EPS non-food related packaging. One MRF (The Recyclery at Newby Island Landfill in San José) reported that it accepts food-related EPS only if it is sufficiently cleaned. Local MRFs have stated that that there are no plans for expansion of their current programs regarding this material. The Recyclery which is the sole MRF with the ability to densifiy EPS – a necessary process for cost-effectively handling any EPS – has also stated that they have no plans for expanding their processing of EPS.

Cost of Managing EPS at San José MRFs

San José's residential garbage and recycling programs is served by several MRFs, including GreenWaste, GreenTeam, Z-Best, and California Waste Solutions. These facilities incur additional costs to their operation from having to mitigate EPS that blows around work facilities as well as from degraded market value for the commodities they recover due to EPS contamination in bales of material to be recycled, or in finished compost to be sold to the landscape industry. The MRFs report that it is difficult to quantify these costs since they do not keep track of contamination costs for each type of material collected.

EVALUATION AND FOLLOW-UP

Implementation efforts and reporting of progress toward the 40 percent reduction goal will be reported to the City Council and the Water Board through the Stormwater Permit's Annual Report. Staff will report to the T&E Committee in 2013 with an update on the Water Board's acceptance of the regional methodologies for determining baseline trash load and trash load reduction credits, status of the City's trash reduction efforts, and identification of potential actions that best balance the City's priorities and meet the long term trash reduction requirements of the Stormwater Permit.

Table 5.1
Solid Waste Management System: Summary Plan of Action

FACILITY/ PROGRAM	SUMMARY PLAN OF ACTION
Shady Grove Processing Facility and Transfer Station	Assessment of the relocation of yard waste transfer and grinding operations to Gude Landfill subject to future County Council appropriation. Maximize materials sold as mulch to minimize tonnage sent for composting. Set yard waste tip fee per Section 5.4.2.1
Resource Recovery Facility	Periodically explore the feasibility of RRF ash and/or non-ferrous recycling. Set tip fee per Section 5.4.2.1. Aggressively market electricity and ferrous to secure the best prices available. Conduct detailed energy balance analysis to maximize thermal and power efficiency.
Materials Recovery Facility	Continue to aggressively market recovered materials to capture best prices. Encourage increased usage of unused MRF capacity by non-residential generators.
Yard Trim Composting Facility	Continue aggressive promotion of grasscycling and backyard composting. Maintain back-up contracts for composting yard trim in excess of 77,000 tons. Increase market share and diversity of compost products produced by the County. Continue on-going program to periodically replace portions of paved pad and improvements to on-site storm water management.
Out-of-County Landfill	Encourage private sector recycling of construction and demolition materials and other nonprocessible solid waste rather than landfilling.
Land Reserved for Potential Future In-County Landfill	Retain the Site 2 property, located in Dickerson, MD, through the entire life of Plan for use in the event economic conditions, changes in law or other circumstances render out-of-County waste disposal infeasible.
Waste Transportation System	Monitor the performance of all transportation contractors to ensure reliability. Build contingency capacity to ensure waste transport.

Recycling and Waste Reduction Programs	Aggressively encourage backyard composting including giving away compost bins. Periodically evaluate the rates at which each type of recyclable is being captured. Increase capture of all recycled materials through existing programs and outreach. Rigorously enforce the recycling bans instituted by ER15-04AM and 18-04. Vary size and styles of replacement carts to fit housing types and maximize usage. Examine the feasibility of targeting additional materials types for recycling including food waste generated at restaurants, schools and institutions. Continue to evaluate innovative collection techniques to increase recycling. Continue to promote cooperative collection contracting among commercial generators
Private Facilities	Work cooperatively to promote expansion and use of private recycling infrastructure within County, including C&D.
Oaks and Gude Landfills	Operate an oil-grit separator for nonprocessible solid waste collected from County storm water captors at Oaks. Implement gas-to-energy projects at both landfills. Improve gas capture and minimize migration.
System Financing	Maintain transparency in fiscal management. Monitor revenue generation methods to assure fair and equitable rates. Track current market conditions to maintain competitive tip fees. Monitor commodity markets to assure County receives most favorable revenues and credits possible from the sale of all recovered resources.
Greenhouse Gasses and Ozone-Related Emissions	Complete solid waste system-wide inventory of GHG and ozone-related emissions. Include net emissions effects in the consideration of future changes in solid waste management system, including but not limited to any addition of new materials targeted for recycling, and changes to the collection and transportation systems. Work with the private sector (subscription) collectors to quantify and reduce emissions.
Collection	Use creative techniques to encourage contracted haulers to propose environmentally friendly options.

ROCKVILLE, MARYLAND

MEMORANDUM

October 14, 2014

TO: Craig Rice, President, County Council

FROM: Jennifer A. Hughes, Director, Office of Management and Budget
Joseph F. Beach, Director, Department of Finance

SUBJECT: Bill 41-14, Solid Wastes - Food Service Products - Packaging Materials – Requirements

Please find attached the fiscal and economic impact statements for the above-referenced legislation.

JAH:mc

cc: Bonnie Kirkland, Assistant Chief Administrative Officer
Lisa Austin, Offices of the County Executive
Joy Nurmi, Special Assistant to the County Executive
Patrick Lacefield, Director, Public Information Office
Joseph F. Beach, Director, Department of Finance
David Platt, Department of Finance
Fariba Kassiri, Department of Environmental Protection
Matt Schaeffer, Office of Management and Budget
Felicia Zhang, Office of Management and Budget

The total first year fiscal impact reported by county departments and agencies is $219,432 and this amount will fluctuate depending on the enforcement method used in upholding the polystyrene ban in Bill 41-14.

3. **Revenue and expenditure estimates covering at least the next 6 fiscal years.**

After taking into account those departments and agencies that have already taken steps to minimize or stop the use of Polystyrene in daily operations, the county is left with the following known fiscal impacts to operating expenses when the ban takes effect:

MCPS: $60,000/year for all additional Polystyrene containers for a six-year total of $360,000.

HHS: $159,432/year for non-exempt meals delivered by Meals on Wheels for a six-year total of $956,592.

The total annual fiscal impact reported by county departments and agencies is $219,432 and $1,316,592 over 6 years. This amount will fluctuate depending on the enforcement method used in upholding the polystyrene ban in Bill 41-14.

Additional personnel expenditures are anticipated if dedicated enforcement of Bill 41-14 is required:

SWS: dedicated enforcement costs would be approximately $75,000 and a one-time vehicle cost of $40,000 for a six-year total of $490,000. No additional costs if enforcement is complaint driven.

HHS: dedicated enforcement situation would be the equivalent 800 less health inspections annually or a six year total of the equivalent of 4,800 health inspections. No additional costs if enforcement is complaint driven.

4. **An actuarial analysis through the entire amortization period for each bill that would affect retiree pension or group insurance costs.**

Not Applicable.

5. **Later actions that may affect future revenue and expenditures if the bill authorizes future spending.**

Not applicable.

6. **An estimate of the staff time needed to implement the bill.**

SWS reported that a dedicated enforcement approach would require one additional inspector at a total personnel cost of $75,000 and a vehicle cost of $40,000.

HHS reported that a dedicated enforcement approach would require an additional 10 minutes of inspection time per inspection for an annual impact equivalent of 800 less health inspections annually.

7. **An explanation of how the addition of new staff responsibilities would affect other duties.**

   Under a complaint-driven enforcement plan to Bill 41-14, inspection staff would have less time to perform other inspection duties if the task of responding to polystyrene use complaints was added to the list of current areas of inspection.

8. **An estimate of costs when an additional appropriation is needed.**

   Not applicable.

9. **A description of any variable that could affect revenue and cost estimates.**

   Cost estimates related to enforcement may change due to enforcement trends in the years following the polystyrene ban and enforcement resources may need to be adjusted based on actual rates of non-compliance with the law. The method of enforcement chosen for Bill 41-14 will also impact cost estimates.

10. **Ranges of revenue or expenditures that are uncertain or difficult to project.**

    Not applicable.

11. **If a bill is likely to have no fiscal impact, why that is the case.**

    Not Applicable.

12. **Other fiscal impacts or comments.**

    Not Applicable.

13. **The following contributed to and concurred with this analysis:**

    Dan Locke, Department of Environmental Protection
    Eileen Kao, Department of Environmental Protection
    Eric Coffman, Department of General Services
    Matt Schaeffer, Office of Management and Budget
    Patricia Stromberg, Health and Human Services
    Thomas Klausing, Montgomery County Public Schools
    Linda Hickey, Montgomery College

Jennifer A. Hughes

Jennifer A. Hughes, Director
Office of Management and Budget

10/14/14
Date

Economic Impact Statement
Bill 41-14, Solid Waste (Trash) – Food Service Products – Packing Materials – Requirements

Background:

This legislation would prohibit the use of certain expanded polystyrene food service products by food service industry; require the use of compostable or recyclable food service ware by the County, County contractors or lessees, and food service businesses; prohibit the sale of certain expanded polystyrene food service products, and expanded polystyrene loose fill packaging; and provide for enforcement.

Polystyrene is a synthetic aromatic polymer made from the monomer styrene, a liquid petrochemical. Polystyrene has been one of the most widely used plastics with production of several billion kilograms per year (Source: *Ullman's Encyclopedia of Industrial Chemistry*). Uses of polystyrene include protective packaging (packing 'peanuts', CD and DVD cases), bottles, trays, tumblers, and disposable cutlery. It is very slow to biodegrade.

1. **The sources of information, assumptions, and methodologies used.**

Sources of information include:

- Department of Environmental Protection (DEP) – Solid Waste Services
- Bureau of Labor Statistics
- Department of Economic Development (DED)

Bill 41-14 will prohibit the use of certain *expanded* polystyrene (EPS). EPS is a rigid and tough, closed-cell, lightweight foam, and it is usually white and made from pre-expanded polystyrene beads. EPS is used for disposable trays, plates, bowls, and cups; for carryout packaging; and for building insulation and packing material. However, if a product is packaged with EPS by a company or firm outside the County, the product is excluded under Bill 41-14. Also excluded under Bill 41-14 is Rigid Polystyrene (RPS) sheet or molded polystyrene which include, but not limited to, plastic cutlery and CD and DVD "jewel" cases.
Bill 41-14 would affect but not limited to the following businesses:

- Restaurants that provide carryout containers and food service ware to their customers,
- Packing and shipping companies that use "peanut" packing material, and
- Retail stores that sell products made of expanded polystyrene.

According to data provided by the Division of Solid Waste Services, the amount of expanded polystyrene (EPS) tonnage disposed of in the County amounted to 6,771 tons (based on 2012-2013 Waste Composition Study conducted by DEP). That tonnage represented slightly over one percent of the refuse disposed in the County in calendar year 2012. Disposal of rigid polystyrene (RPS) wastes, which are excluded under Bill 41-14, amounted to 5,865 tons, or less than one percent of total tonnage of

refuse disposed. Note that a portion of this tonnage of RPS, namely food service ware, would most likely be disallowed for use in 2017 because it is not recyclable.

According to the Bureau of Labor Statistics (BLS), U.S. Department of Labor, four firms in the State of Maryland manufactured EPS products in calendar year 2012 and with an employment of 180. Because of disclosure restrictions, BLS provides no data on the number of firms in 2013. According to BLS, there are no businesses in the County that manufacture EPS products.

2. **A description of any variable that could affect the economic impact estimates.**

Because of the prohibition of certain expanded polystyrene products in the County, the economic impacts are uncertain because of the paucity of data on the number of products sold to customers or provided to customers in carryout containers. Because the prohibition would encourage the replacement with recyclable or compostable products, the costs to businesses and prices to final customers could increase depending on the cost/price differential between expanded polystyrene products and recyclable/compostable products. If that differential is *de minimis*, then there is little or no economic impact on employment, spending, saving, investment, incomes, and property values in the County.

However, data provided by the DED assumes that current cost for Styrofoam containers and cups is about $0.25 per unit while the cost for plastic alternative is $0.35 per unit. Based on additional data obtained by DED from the National Restaurants Association of $50,700 revenue per employee and the cost for a typical meal of $9.00, the number of meals sold is 5,633. Using that data, the Department of Finance and DED undertook separate analyses to estimate the economic impact on restaurants in the County. Based on those analyses, profits for restaurants would decline by approximately $16.2 million assuming the price of the typical meal is constant at $9.00. The analyses did not factor that some food establishments may not be effected by Bill 41-14 because they currently use recyclable and compostable products.

3. **The Bill's positive or negative effect, if any on employment, spending, saving, investment, incomes, and property values in the County.**

Based on the assumption of a small impact on total revenue from the price differential between expanded polystyrene products and recyclable/compostable products, Bill 41-14 would have modest economic impact on either restaurants due a decline in profits or consumers due to an increase in the cost of the meal.

However, because of the lack of specific data, this analysis did not include the economic impacts on packing and shipping establishments located in the County. For example, companies located in Montgomery County that currently use Styrofoam

material in their packing process may relocate their operations to another jurisdiction. Such relocation may result in the loss of jobs in Montgomery County.

4. **If a Bill is likely to have no economic impact, why is that the case?**

   Please see #3.

5. **The following contributed to or concurred with this analysis**: David Platt and Rob Hagedoorn, Finance; Dan Locke and Eileen Kao, Department of Environmental Protection, Solid Waste Services.

Joseph F. Beach, Director
Department of Finance

10/13/14
Date

Bill 41-14, Solid Waste (Trash) – Food Service Products – Packaging Materials – Requirements

Summary of Fiscal Impact Statement

The Executive's fiscal and economic impact statement for Bill 41-14 is attached to this review. The fiscal impact statement provides a summary of the potential costs associated with the bill as well as potential economic impacts on County restaurants. Key components include:

- **$219,432 in annual costs** for MCPS ($60,000) and DHHS ($159,432) to switch from polystyrene packaging to alternative products. Montgomery College reports that its retail establishments that use polystyrene can transition to other materials with no significant fiscal impact.
- **$75,000 in annual personnel costs** in DEP and a reduction in 800 health inspections per year by DHHS staff, if Bill 41-14 as implemented requires dedicated enforcement instead of complaint driven enforcement.
- **$16.2 million decline in profits** for food service establishments located in Montgomery County, due to a projected cost increase for non-polystyrene packaging of $0.10 per unit.

While each key component of the fiscal impact statement is important, OLO focused its review of the fiscal and economic impact statement for Bill 41-14 on the estimated $16.2 million decline in profits.

Executive Branch Methodology for Estimating Economic Impact to County Restaurants

At OLO's request, the Department of Finance provided the data, assumptions, and methodology used to arrive at the estimated $16.2 million profit decline. In sum, Finance and the Department of Economic Development (DED) calculated the projected economic impact by: 1) estimating the reduction in profit per meal from switching from polystyrene (or Styrofoam) to plastic or paper containers; 2) used national-level data on the average profit and meals served per employee in the restaurant industry to calculate both the reduction in profit per meal and estimated profit loss per employee; and 3) multiplied the estimated profit loss per employee by the total number of food service industry employees in Montgomery County to reach the total estimated economic impact.

Key assumptions and data points used by Finance and DED

- Based on restaurant industry averages, operating/controllable expenses (which include the cost of containers) make up 9.5% of the total cost to produce a meal.
- An average meal costs $9. This represents a typical lunch price with a drink in a carryout setting based on a sample conducted by DED. Finance and DED note that $9 is likely at the high end of lunch prices, but this was done to allow for the lunch price to absorb the minimal use of take home containers at dinner service.
- DED estimated the current unit cost of a Styrofoam container and cup at $0.25, and the unit cost of a paper or plastic alternative container and cup at $0.35.
- A typical restaurant serves 5,633 meals per employee and earns $50,697 in revenue per employee based on national-level data from the National Restaurant Association.
- Montgomery County has 28,744 employees in the food services industry according to the Bureau of Labor Statistics' Quarterly Census of Employment and Wages, 2013 Annual Average.

Calculation methodology used to derive projected economic impact

1) Applying the incremental cost of $0.10 per meal to operating/controllable expenses, Finance estimated that for the same $9 meal a restaurant's gross profit was reduced by $0.09 as shown in Table A.

Table A. Difference in Restaurant Cost and Gross Profit

	Styrofoam ($0.25 per unit)		Paper/Plastic ($0.35 per unit)	
Sales Price Per Meal	$9.00		$9.00	
Total Restaurant Cost	$8.60	95.5%	$8.70	96.6%
Gross Profit	$0.40	4.5%	$0.31	3.4%

2) To calculate the total cost per employee, Finance multiplied the Total Restaurant Cost, shown above, for the Styrofoam and paper/plastic scenarios by the estimated 5,633 meals served per employee. Finance then subtracted the total cost per employee from the revenue per employee ($50,697) assumption and arrived at an estimated profit per employee. As shown in Table B, the estimated profit per employee was $563 lower when using non-Styrofoam containers.

Table B. Cost and Estimated Profit per Employee

	Revenue Per Employee	Total Cost per Employee	Profit per Employee
Styrofoam	$50,697	$48,416	$2,281
Paper/Plastic	$50,697	$48,979	$1,718
		Difference	**($563)**

3) Using the Quarterly Census of Employment and Wages data from the Bureau of Labor Statistics, Finance determined that the total number of employees working in Food Services and Drinking Places in Montgomery County is 28,744.

4) Applying the decreased profit per employee ($563) times the 28,744 food services employees, Finance estimated a loss in profits of approximately $16.2 million.

Variables Impacting the Potential Economic Impact

OLO found four key variables impacting the projected decline in profits. A range of reasonable assumptions applies for these variables that can lead to large changes in the projected economic impact.

- **Number and type of restaurant industry employees used to calculate profit loss.** As noted above, Finance used the total food service employees in the County (28,744) to estimate the profit loss. However, this total combines employment figures for Full Service Restaurants (i.e., those where patrons order and are served while seated and pay after eating), Limited Service Restaurants (i.e., those where patrons generally order or select items and pay before eating), and other food service types such as cafeterias, buffets, cafes, etc.

Since Full Service Restaurants typically use reusable tableware and only use containers if a patron requests to take home a portion of their meal, it is reasonable to examine how the projected profit loss would change if the employees who work in those locations were excluded from the calculation. As shown in the table below, by excluding employees in Full Service Restaurants the projected economic impact would decrease to $8.4 million – a reduction of nearly 50%.

Table C. Distribution of Finance Department Economic Impact Calculation by Restaurant Type

Restaurant Type	Number of Employees	Portion of Finance's Projected Profit Loss
Full Service Restaurants	13,907	$7,833,813
Limited Service Restaurants	10,715	$6,035,759
Other (Cafeterias, Buffets, Snack and Beverage Stores, Food Trucks, etc.)	4,122	$1,160,961
Total Excluding Full Service	**14,837**	**$8,357,682**

Additionally, the $9 meal price used by Finance and DED is based on carryout lunch locations that would most likely qualify as Limited Service Restaurants.

- **Accounting for restaurants that already use non-polystyrene containers.** The economic impact statement notes that the $16.2 million does not account for food establishments in the County that already use non-polystyrene products and therefore would not be affected by Bill 41-14. The number of employees in the County's restaurant sector that work in these food establishments could have a substantial affect on the projected economic impact. Table D shows how the projected economic impact would change if 25%, 50%, or 75% of food service employees in the County work at establishments that do not use polystyrene – both for total employees in all restaurant types and for employees of only Limited Service and All Other restaurant types.

Table D. Range of Projected Economic Impact Based on the Percent of County Food Service Employees Already Working in Establishments that Do Not Use Polystyrene Products

Projected Economic Impact for...	% of Employees in Establishments Not Using Polystyrene		
	25%	50%	75%
All Restaurant Types (28,744 employees)	$12,143,621	$8,095,747	$4,047,874
Limited Service and Other Restaurant Types (14,837 employees)	$6,268,262	$4,178,841	$2,089,420

(111)

- **Range of per unit cost increase.** The economic impact statement assumes an increase of $0.10 per unit to switch from Styrofoam containers and cups to paper or plastic alternatives. If Bill 41-14 was enacted and demand for non-polystyrene products increased among County businesses, it is possible that this marginal cost difference could decrease. At the same time, a business or consumer may need to purchase a more expensive container to obtain the same characteristic of a polystyrene container. To show the impact of different per unit costs, OLO used Finance's methodology to estimate the impact if the marginal cost was lower or higher. If the marginal cost increase was $0.05 per unit instead of $0.10, the estimated economic impact would decrease to $8.1 million. If the marginal cost increase was $0.15 per unit, the estimated economic impact would rise to $24.3 million.

  In researching information on the cost impact in other jurisdictions with polystyrene bans or restrictions, OLO found that some create purchasing cooperatives to reduce potential costs for businesses. Locally, in conjunction with its polystyrene ban, the District of Columbia is "preparing to support businesses with a list of vendors of alternative materials, and coordinating cooperative buying arrangements to help lower costs."[1] In another example, Los Altos, CA started a green cooperative in 2010 to provide bulk order discounts to businesses for purchasing non-polystyrene products from a local restaurant supply store.[2]

- **Methodology assumes restaurants will bear entire cost.** The calculated loss in profits assumes food establishments will absorb the entire cost for replacing Styrofoam containers. However, an equally likely scenario is that some or all of the cost will be transferred to the consumer. This could occur either as an increase in meal price or a decrease in food quantity. In a scenario where a restaurant increased the price of a meal by $0.10 to correspond with the increased materials cost, there may be an economic impact from higher costs of meals but it likely would be different than the costs estimated in this analysis.

OLO Staff Contacts: Craig Howard and Stephanie Bryant

[1] http://greatergreaterwashington.org/post/23547/the-plastics-industry-says-trash-is-not-a-problem-in-the-anacostia-river-dc-councilmembers-disagree/

[2] Green Town Los Altos, "Business Co-OP," http://greentownlosaltos.org/programs/business-co-op/ (accessed 10/17/2014)

1. INTRODUCTION AND FINDINGS

This economic impact study has been developed to inform policy makers on the anticipated impacts of a proposed ban on Expanded Polystyrene (EPS) Foodware. The City of San José seeks to restrict the use of EPS due to the disproportionately negative impacts of EPS on local streams and waterways. A proposed ban would affect all food service establishments in the San José city limits and would be part of a growing trend where over 60 California local governments have prohibited the use of EPS take-out foodware. As of the date of this report, the Cities of Sunnyvale, Mountain View, Morgan Hill, and Cupertino are also proposing citywide bans of EPS foodware.

The City of San José is considering banning the use of EPS foodware ("to go" ware). The central purpose of the ban is to eliminate this key pollutant to improve water quality. Secondary reasons for prohibiting the use of EPS foodware are to reduce landfill trash, improve material recycling, and help the City meet its National Pollutant Discharge Elimination Systems (NPDES) requirements. As part of the City of San José's consideration of a proposed ban, the City is concerned about the potential, unintended impacts of the proposed ban on the City's restaurant industry and on its small, independent restaurants in particular. The purpose of this report is to inform the City's policy decisions concerning EPS by assessing the potential impacts of the proposed ban on the City's restaurant industry.

This assessment takes an independent look at the available information on the City of San José's restaurant industry and the broader context of restaurant industry operations as well as available literature on industry responses to cost increases and consumer responses to menu price increases. The assessment has been informed by the work of Cascadia Consulting Group on differences in packaging costs by product type (see Cascadia Consulting Group, "EPS Food Service Ware Alternative Products: An Evaluation of Costs and Landfill Diversion Potential," August 2012 [the Cascadia Report]). It should be noted that this analysis was conducted using an earlier version of the Cascadia Report that included more conservative (higher) estimates of the cost differential between EPS and alternative products (as well as the lower, expected differentials presented in the current Cascadia Report). As a result, this economic analysis presents conservatively high estimates of cost differentials and associated impacts.

The assessment has also been informed by the input of independent advisor and packaging expert, Dr. Fritz Yambrach, Director of the Packaging Department at San José State University (see **Appendix A**) and input from restaurant operators based in the Bay Area and elsewhere.

In addition, this report presents an analysis of potential customer responses to restaurant price changes (see **Appendix B**) as well as a brief synopsis of the experiences of other Bay Area cities that have implemented ordinances restricting EPS (see **Appendix C**).

There is limited information available on the actual use of EPS by restaurants in San José, and inevitable uncertainty on the specific responses of different restaurants to the ban. As a result, different scenarios and sensitivity analyses were conducted to evaluate potential impacts on restaurants of different types and circumstances.

Most foam foodware is made from EPS foam beads, while some (including plates, trays, and some clamshells) are made from extruded polystyrene foam sheets (which the industry abbreviates as "XPS"). All such products are referred to in this document as EPS.[1]

Summary of Findings

1. ***The City of San José includes a diverse variety of restaurants as measured by sales, employment, independents/chains, full-service/limited-service, menu prices, and food offerings.*** Even in the aftermath of the Great Recession, the City of San José has a substantial restaurant industry. Sources of information on restaurants place the number of eating places/ restaurants in the City at between 1,650 and 2,000 establishments.[2] Based on the detailed Dunn and Bradstreet information on restaurants in San José, about 63 percent of these restaurants are full-service restaurants and 37 percent limited service.[3] Single-site restaurants represent about 73 percent of San José restaurants. Within the single-site classification, about 78 percent are full-service and 22 percent are limited service restaurants.

2. ***The restaurant industry is highly competitive and restaurants are continuously dealing with changes to input costs.*** The long historical upward trend in U.S. consumer demand for "food away from home" and the scale of overall demand continues to attract new restaurants to the City of San José. Existing and new restaurants face significant competition based on quality, prices, convenience, and experience; the failure rates among new U.S. restaurants are especially high in the first five years of operation. At the same time, restaurants must continuously adjust to cost variations. Many food and other costs vary monthly and these fluctuations con often be quite significant.

3. **The proposed ban on EPS will increase packaging costs for restaurants currently using EPS.** The Cascadia Report provides detailed documentation on current price points of a range of "to go" ware products – cups, clamshells, bowls, and plates – for EPS and alternative products. On average, unit costs for suitable alternative packaging (paper/fiber or plastic) are currently twice those of EPS. For example, the average cost for a 7-inch plate

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[1] "Styrofoam" is a trademark of The Dow Chemical Company for extruded foam products used as building materials and craft supplies. Although foam cups, bowls, clamshells, and trays made from EPS foam beads or from extruded polystyrene foam sheets (XPS) are commonly referred to as "Styrofoam" by the public and in the media, Dow's Styrofoam products are not used to make foam cups or any other food service products.

[2] This includes estimates from Dunn and Bradstreet and InfoUSA, the two leading private providers of business information. It also encompasses information from the City of San José business tax database sorted to identify restaurants/ private eating places.

[3] Full-service restaurants are defined as those establishments with waiter/waitress service and where an order is taken while the patron is seated. Limited service restaurants are defined as those establishments in which patrons order at a cash register, use a drive-thru or select items from a food bar. The term limited service café is a termed used by Economic & Planning Systems, Inc. in this report to refer to cafes/ coffee shops.

increases from $0.03 for EPS to $0.05 for a fiber plate, a 8-inch 1-compartment clamshell increases from $0.12 to $0.24, and a 12-oz hot cup increases from $0.03 to $0.09. Average unit cost increases by product type generally ranged from 40 to 100 percent, with the exception of hot cups, which averaged a three-fold increase. It should be noted that neither the Cascadia Report nor this report considers additional effects of an EPS ban on restaurant operating costs, such as reduced storage costs due to the more compact storage qualities of alternative materials.

4. **The San José restaurant industry as a whole will not be substantially affected by an EPS ban.** While varied in nature, the academic research and professional analysis reviewed regarding restaurant responses to cost increases as well as customer responses to price increases indicate that the demand for restaurant offerings (food away from home) is generally inelastic and remains strong even if the menu price increases. Cost increases associated with the proposed EPS ban will be more restaurant-specific, and to the extent that individual restaurants cannot adjust to or absorb the cost increases, a substitution away from affected (heavier EPS users) restaurants to unaffected restaurants (lighter/non-EPS users) would be expected. As a result, overall sales at San José restaurants as a whole are not likely to be affected.

5. ***The impact on individual restaurants currently using EPS will vary based on a number of factors.*** Interviews with restaurateurs and available cost data indicated that restaurants are continuously dealing with changes in costs. There are a number of strategic responses employed by restaurants in the face of increasing costs that first seek to adjust costs/pass-on costs before accepting a reduction in profits or a noticeable increase in menu prices (and associated loss of sales). These strategies include reducing other costs, re-envisioning use of the more costly material, and increasing menu prices in the least noticeable manner. They are also often implemented over time, lessening the longer-term impacts of the cost increases. The sensitivity analyses conducted in this report identified: (1) current profit margin relative to industry average, (2) proportionate expenditure on "to go" ware, (3) proportionate use of EPS among "to go" ware expenditures, and (4) restaurant opportunity/ability to manage cost changes without reducing profit or losing customers.

6. ***Full-service restaurants will be the least affected.*** "To go" ware expenditures are a substantially lower proportion of sales revenues for full-service restaurants – estimated to average 0.3 percent. Even with a significant use of EPS among "to go" ware materials, the overall impact of the proposed ban is unlikely to be significant for the large majority of full-service restaurants.

7. ***The impact of the proposed ban on limited-service restaurants will range from none to substantial.*** On average, limited-service restaurants are estimated to spend about 1.6 percent of sales revenues on "to go" ware. In cases where no EPS "to go" ware is used, there will be no impact from the ban. In cases where limited service restaurants are making average industry pre-tax profits (about 6 percent), the impacts will only be substantial under the most conservative scenario. Such a scenario assumes the large majority of "to go ware" expenditures to be on EPS and restaurants being unable to offset the cost increases (and so primarily fund the cost increases out of their profit margins). In cases where profit margins are well below the average, the impacts on heavy EPS users will be more substantial as a proportion of lost profit.

8. ***Particular types of limited service restaurants are more likely to be affected by the cost increases, though these cost increases will rarely be the sole cause of a market exit (restaurant closure).*** More substantial impacts will be experienced by restaurants with heavy use of EPS cups for hot liquids; for smaller, lower revenue restaurants with less capacity to gather, analyze, and respond to cost data and changes; and restaurants with minimal profit margins. Coffee shops/cafes may be more affected as the packaging cost increases are proportionally higher for heavy users of EPS hot cups than for other product types (clamshells, bowls etc.). The cost increase associated with the proposed ban is only likely to result in a market exit where profit margins were already very low and restaurants were already vulnerable to fluctuations in other costs.

9. ***If the proposed ban is adopted, the implementing approach of other communities provides some useful guidance.*** Interviews with staff at other Bay Area cities enacting a similar ban (see **Appendix C**) as well as in other geographic regions provided important conclusions on practices for effective ban implementation, including: (1) providing sufficient notice that restaurants are able to use their existing inventory; (2) providing sufficient information on alternative products so restaurants can start to explore alternatives and make strategic changes prior to the ban enactment; (3) supporting the transition by providing clear information to restaurants on acceptable alternatives; and, (4) having a clear and transparent enforcement process. Several of the Bay Area cities interviewed offered hardship exemptions though there were no recorded cases of exemption application. There are three primary approaches to hardship exemption that the City of San José could consider: (1) providing no hardship exemptions to avoid the administrative complexity and different approaches for different types of restaurants; (2) providing a general opportunity for hardship exemption, similar to other cities, where the restaurant must come forward and explain its unique circumstances that make an exemption important; (3) establishing hardship exemptions for the types of restaurants that might be most affected (e.g. small, single-site, limited service restaurants with modest annual gross sales revenues). Similarly, distinctions in the timing of phase-in for the ban could be made between different types of restaurants.

Report Organization

In addition to this chapter, this report includes four additional chapters. **Chapter 2** provides a brief overview of restaurant industry market dynamics and the City of San José restaurant industry. **Chapter 3** provides estimates of potential cost impacts of the proposed EPS ban, based on the Cascadia Report and additional research. **Chapter 4** characterizes the uncertain cost environment of restaurant operations and describes the potential responses of restaurants to cost increases, including findings on customer response to menu prices increases. Building from the research in the preceding chapters, **Chapter 5** develops and analyses a series of impact scenarios designed to assess the potential level of ban impact on different types of restaurants operating under different types of conditions.

Riemer Amendment

This amendment would provide that the exemption for materials used to package raw, uncooked, or butchered meat, fish, poultry, or seafood for off-premises consumption applies to the Bill's requirement for the use of compostable or recyclable disposable food service ware. The Bill, as drafted, exempts these materials from the ban on expanded polystyrene food service products.

Amend lines 70-75 at © 4 as follows:

(c) A food service business selling or providing food or beverages for consumption on or off premises in disposable food service ware must use compostable or recyclable disposable food service ware; provided, that this subsection does not apply to:

(1) prepackaged food or beverages that were filled and sealed outside of the County before a food service business received them; or

(2) materials used to package raw, uncooked, or butchered meat, fish, poultry, or seafood for off-premises consumption.

Riemer Amendment 2

This amendment would change the effective date of the requirement that a County agency, department, contractor or lessee use recyclable or compostable disposable food service ware from 90 days after the Act becomes law to January 1, 2016.

Amend lines 104-113 at © 5-6 as follows:

(b) The requirement for a County facility, agency, department, contractor, or lessee to use compostable or recyclable disposable food service ware established by Subsections 48-54 (a) and (b) takes effect [[90 days after this Act becomes law]] on January 1, 2016. Notwithstanding any other provision, a County facility, agency, department, contractor, or lessee may use disposable food service ware already purchased as of the effective date of this Act until the supplies are exhausted or until January 1, 2017, whichever is earlier, including disposable food service ware that the County facility, agency, department, contractor or lessee is obligated to purchase under any contracts in force on the effective date of this Act.

2014 Anacostia Watershed Litter Survey

A Survey of Litter along
96 Roadway and Non-Roadway Sites
within the Anacostia Watershed

Conducted in

District of Columbia, Montgomery County, and Prince George's County

by

Environmental Resources Planning, LLC

Final Report

December 30, 2014

ER PLANNING

2014 Anacostia Watershed Litter Survey

Executive Summary

In October and November 2014, Environmental Resources Planning, LLC conducted a comprehensive litter survey of the Anacostia Watershed, which encompassed certain portions of the District of Columbia (DC) as well as Montgomery and Prince George's Counties in Maryland. The purpose of this survey was to gauge the amount and composition of litter along roadways and in non-roadway sites in and/or adjacent to waterways identified by Anacostia Watershed Society as indicator streams.

The methodology used to conduct these litter surveys consisted of tallying each littered item observed and making note of its material composition. This is comparable to the methodology used with most litter surveys conducted throughout the U.S. and Canada.

Methodology Overview

The first part of this survey consisted of selecting 84 roadway sites using a stratified random selection process. This involved identifying each census tract located within the Anacostia Watershed and weighting each of them based on population density. In addition, 18 of these sites were selected from Montgomery and Prince George's Counties to ensure representation of Anacostia communities in Maryland.

The second part of this survey focused on 12 special research (non-roadway) sites. Eight of these site locations were provided by Anacostia Watershed Society and were adjacent to indicator streams or trash traps monitored by Anacostia Watershed Society. The remaining four sites were selected based on their proximity to indicator streams for trash in the Anacostia Watershed. The sites surveyed in this part of this survey were selected based on geographic representation of the three major jurisdictions sampled, public access and sufficient area for sampling using mapping software to visually assess each site. Since the non-roadway sites were hot spots and not randomly selected areas, the resulting data will be informative, but cannot be extrapolated or statistically tested.

For both parts of this survey, litter was classified as either *Large Litter* (four inches or larger) or *Small Litter* (smaller than four inches). The optimal site length was 300 feet and the optimal width was 18 feet. *Small Litter* was counted on the entire site when feasible. Otherwise, three transects at the beginning, middle, and end of each site were surveyed. The optimal size of each transect was six feet in width and 18 feet in length. The resulting data was extrapolated to the entire length of the site.

Each site was photographed and documented. Each item was characterized by material composition. A short video was taken if the site was heavily littered. *Misc. Paper* and *Misc. Plastic* refer to unidentifiable items that have typically been mowed over and/or weathered so that the exact product type is uncertain. Items made of multiple materials (e.g., toys, vehicle parts and certain home articles, etc.) were classified as *Composite*. Items designated as recyclables in the lists below were those materials currently accepted in local recycling programs.

2014 Anacostia Watershed Litter Survey

Litter Survey Results - Highlights

The data below represents all sites surveyed in DC, Montgomery County and Prince George's County. Detailed breakdowns of this data can be found in the main report and in the Appendix.

Data from the 84 roadway sites was based on a stratified random sampling methodology and is representative of roadway litter in the Anacostia Watershed.

Roadways - Large Litter

- Largest Components by Count
  1. *Sweet Snack Wrappers* (7.9 percent)
  2. *Paper Fast Food Napkins - Unbranded* (6.9 percent)
  3. *Misc. Paper* (5.9 percent)

Roadways - Small Litter

- Largest Components by Count
  1. Glass (28.7 percent)
  2. Cigarette Butts (23.8 percent)
  3. Paper Scraps (15.0 percent)

Data from the 12 non-roadway sites was based on areas identified as litter hot spots. This data is instructive and represents materials that are problematic in specific areas, but is not statistically representative of overall conditions.

Non-Roadways - Large Litter

- Largest Components by Count
  1. Water Bottles - Plastic (5.4 percent)
  2. Beer Cans (5.2 percent)
  3. Snack Food Packaging (4.1 percent)

Non-Roadways - Small Litter

- Largest Component by Count
  1. Glass (23.4 percent)
  2. Paper Scraps (15.6 percent)
  3. Hard Plastic (11.0 percent)

2014 Anacostia Watershed Litter Survey

Roadway Survey Results - Montgomery County

Large Litter on Montgomery County Roadways

A total of 134 items of *Large Litter* were tallied on the nine Montgomery County roadway sites for an average of about 15 pieces per site. Recyclables comprised 20 percent of *Large Litter* in Montgomery County.

The data shows that *Misc. Plastic* (16.4 percent) was the largest component of *Large Litter*, followed by *Sweet Snack Wrappers* (12.4 percent) and *Construction Debris* (10.9 percent). The top 20 components comprised 83.3 percent of *Large Litter* in Montgomery County as shown in Table 8.

Table 8 - Large Litter on Montgomery County Roadways - 20 Largest Components

Large Litter Components	Percent
Misc. Plastic	16.4%
Sweet Snack Wrappers (Candy, Cake)	12.4%
Construction Debris	10.9%
Paper Fast Food Napkins - Unbranded	5.7%
Plastic Straws	5.3%
Misc. Paper	4.5%
Container Lids (Plastic)	3.5%
Home Articles (Lamps, Lawn Chairs)	3.0%
Water Bottles (Plastic)	2.5%
Paper Cups (Hot)	2.4%
Stationery (School, Business)	2.4%
Snack Food Packaging (Chips)	2.4%
Plastic Cup Lids/Pieces	2.2%
Soft Drink (Cans)	1.7%
Six-Pack Plastic Rings	1.5%
Other Paper Cups	1.5%
Printed Material (Newspapers)	1.5%
Foil Fast Food Wrappers (Burger Wraps)	1.5%
Other Plastic Shells/Boxes	1.3%
Paper Straw Wrappers	0.9%
Large Litter - Top 20 Components	**83.3 %**

Once litter components were rolled-up by product category, as shown in Table 9, *Retail Packaging* (17.9 percent) comprised the largest category of *Large Litter* in Montgomery County, followed by *Snack Packaging* (14.8 percent) and *Cups, Lids and Straws* (13.0 percent). The components of each category can be found in the Appendix.

Table 9 - Large Litter on Montgomery County Roadways by Category

Large Litter Roll-Up Category	Percent
Retail Packaging	17.9%
Snack Packaging	14.8%
Cups, Lids and Straws	13.0%
Construction/Vehicle Debris	10.9%
Other Fast Food Related	10.2%
Business and Home Papers	9.2%
Beverage Containers	8.0%
Other Containers	5.9%
Miscellaneous	4.6%
Paper and Plastic Bags/Film	4.1%
Tobacco-Related	1.5%
Total	**100%**

Small Litter - Montgomery County Roadways

A total of 2,307 items of *Small Litter* were tallied on the nine Montgomery County roadway sites for an average of about 256 pieces per site. The compiled data shows that *Paper* (38.6 percent) was the largest component, followed by Cigarette Butts (18.6 percent) and Candy/Gum Wrappers (8.5 percent) as shown in Table 10.

Table 10 - Small Litter on Montgomery County Roadways

Small Litter Components	Percent
Paper	38.6%
Cigarette Butts	18.6%
Candy/Gum Wrappers	8.5%
Plastic Film	7.0%
Bottle Caps	6.9%
Hard Plastic	4.7%
Tobacco Packaging	4.0%
Cigar Butts/Tips	3.7%
Polystyrene Foam Packaging - Chunks	2.1%
Aluminum	1.4%
Rubber/Tire Pieces	1.4%

Straw Wrappers - Paper	0.8%
Metal (not Aluminum)	0.7%
Other Materials	0.7%
Polystyrene Foam Packaging - Peanuts	0.7%
Food	0.0%
Glass	0.0%
Polystyrene Foam Food - Cups/Plates/Clams	0.0%
Straws - Plastic	0.0%
Total	**100%**

2014 Anacostia Watershed Litter Survey

Non-Roadway Survey Results - Montgomery County

Large Litter on Montgomery County Non-Roadways

A total of 104 items of *Large Litter* were tallied on the three Montgomery County non-roadway sites for an average of about 35 pieces per site, about 95 percent less than the amount found on DC non-roadways. Recyclables comprised 64 percent of these items.

Stationery (57.7 percent) was, overwhelmingly, the largest component of *Large Litter*, followed by *Plastic Packaging - Other* (5.8 percent) and *Sweet Snack Wrappers* (5.8 percent). As shown in Table 20, the top 20 components comprised 95.2 percent of all *Large Litter* found on Montgomery County non-roadways.

Data from these three non-roadway sites was based on areas identified as litter hot spots. This data is instructive and represents materials that are problematic in specific areas. However, three sites are not statistically representative of overall conditions.

Table 20 - Large Litter on Montgomery County Non-Roadways - 20 Largest Components

#	Large Litter	Percent
1	Stationery (School, Business)	57.7%
2	Plastic Packaging - Other (Film, etc.)	5.8%
3	Sweet Snack Wrappers (Candy, Cake)	5.8%
4	Construction Debris	4.8%
5	Polystyrene Foam Cups	2.9%
6	Beer Bottles (Glass)	1.9%
7	Polystyrene Foam Clamshells	1.9%
8	Plastic Retail Bags - Unbranded	1.9%
9	Misc. Plastic	1.9%
10	Beer (Cans)	1.0%
11	Juice (Cans)	1.0%
12	Polystyrene Foam Packaging - Chunks	1.0%
13	Plastic Retail Bags - Branded	1.0%
14	Plastic Bags - Not Retail (Leaf , Trash)	1.0%
15	Plastic Wrap (Retail Food/Non-Food)	1.0%
16	Printed Material (Newspapers)	1.0%
17	Paper Fast Food Napkins - Unbranded	1.0%
18	Other Plastic Shells/Boxes	1.0%
19	Foil Fast Food Wrappers (Burger Wraps)	1.0%
20	Gum Wrappers	1.0%
Large Litter -20 Largest Components		**95.2%**

Once litter components were rolled-up by product category, as shown in Table 21, *Business and Home Papers* (58.7 percent) comprised the largest category of *Large Litter* on Montgomery County non-roadways, followed by *Paper /Plastic Bags and Film* (10.6 percent) and *Snack Packaging* (7.7 percent). *Paper/Plastic Bags and Film* was predominantly *Plastic Packaging - Other (5.8 percent).*

Table 21 - Large Litter on Montgomery County Non-Roadways by Category

Large Litter Category	Percent
Business and Home Papers	58.7%
Paper/Plastic Bags and Film	10.6%
Snack Packaging	7.7%
Construction/Vehicle Debris	6.7%
Other Fast Food Related	4.8%
Beverage Containers	3.8%
Cups, Lids and Straws	2.9%
Other Containers	2.9%
Retail Packaging	1.0%
Miscellaneous	1.0%
Tobacco-Related	0.0%
Total	**100.0%**

Small Litter on Montgomery County Non-Roadways

A total of 45 items of *Small Litter* were tallied on the three Montgomery County non-roadway sites for an average of 15 pieces per site. *Glass* (28.9 percent) was the largest component followed by *Polystyrene Foam Packaging - Chunks* (17.8 percent) and *Polystyrene Foam Packaging - Peanuts* (15.6 percent) as shown in Table 22. This breakdown was based on a minimal amount of *Small Litter* found on just three sites.

Table 22 - Small Litter on Roadways

Small Litter	Percent
Glass	28.9%
Polystyrene Foam Packaging - Chunks	17.8%
Polystyrene Foam Packaging - Peanuts	15.6%
Hard Plastic	11.1%
Candy/Gum Wrappers	8.9%
Paper	6.7%
Plastic Film	4.4%
Polystyrene Foam Food - Cups/Plates/Clams	4.4%
Cigarette Butts	2.2%
Aluminum	0.0%
Bottle Caps	0.0%

Cigar Butts/Tips	0.0%
Food	0.0%
Metal (not Aluminum)	0.0%
Other Materials	0.0%
Tobacco Packaging	0.0%
Rubber/Tire Pieces	0.0%
Straw Wrappers - Paper	0.0%
Straws - Plastic	0.0%
Total	**100.0%**

Polystyrene Foam Food Service Items in Litter

The tables in this section compile all of the data regarding polystyrene foam food service items found in litter by type and jurisdiction.

Polystyrene Foam Food Service Items in Roadway Litter

Foam food service items comprised an average of 2.4 percent of *Large Litter* in all three jurisdictions overall as shown in Table 26. This is similar to data from recent litter surveys conducted in Rhode Island (2014), San Francisco (2007, 2008, 2009), San Jose (2008, 2009), Texas (2013), Toronto (2012), and Keep America Beautiful's National Litter Survey (2009).

Table 26 - Polystyrene Foam Food Service Items in Large Litter on Roadways

Large Litter Component	All	DC	MC	PGC
Polystyrene Foam Cups	1.1%	1.2%	0.7%	0.4%
Polystyrene Foam Clamshells	1.1%	1.1%	0.0%	1.3%
Polystyrene Foam Fast Food Plates	0.1%	0.2%	0.0%	0.0%
Polystyrene Foam Trays	0.1%	0.0%	0.0%	0.9%
Total	**2.4%**	**2.5%**	**0.7%**	**2.6%**

Similar results were found in the components of *Small Litter*, where foam food service items were also a very small component overall (0.4 percent) as shown in Table 27.

Table 27 - Polystyrene Foam Food Service Items in Small Litter on Roadways

Small Litter Component	All	DC	MC	PGC
Polystyrene Foam Food - Cups/Plates/Clams	0.4%	0.2%	0.0%	1.0%

Polystyrene Foam Food Service Items in Non-Roadway Litter

Data for non-roadway sites was based on a small sampling of areas identified as litter hot spots. This data is instructive and represents materials that are problematic in the specific areas that they were observed. However, since these sites were not statistically derived, they are not expected to provide a statistical representation of overall conditions.

Foam food service items comprised an average of 4.8 percent of *Large Litter* in all three jurisdictions overall as shown in Table 28. This is virtually identical to data from the 2014 Rhode Island Litter Survey (4.7 percent).

Table 28 - Polystyrene Foam Food Service Items in Large Litter on Non-Roadways

Large Litter Component	All	DC	MC	PGC
Polystyrene Foam Cups	1.9%	1.4%	2.9%	4.8%
Polystyrene Foam Clamshells	2.3%	2.1%	1.9%	3.1%
Polystyrene Foam Fast Food Plates	0.5%	0.5%	0.0%	0.7%
Polystyrene Foam Trays	0.1%	0.0%	0.0%	0.7%
Total	**4.8%**	**4.0%**	**4.8%**	**9.3%**

Foam food service items comprised an average of 3.8 percent of *Small Litter* on non-roadways as shown in Table 29. This was slightly higher than in Rhode Island (2.4 percent).

These items comprised a very low portion of *Small Litter* in DC (0.4 percent), but the highest portion in Prince George's County (14.0 percent).

Table 29 - Polystyrene Foam Food Service Items in Small Litter on Non-Roadways

Small Litter Component	All	DC	MC	PGC
Polystyrene Foam Food - Cups/Plates/Clams	3.8%	0.4%	4.4%	14.0%

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Polystyrene Foam Packaging Items in Litter

The tables in this section compile the data for polystyrene foam packaging items. These include packaging items such as peanuts and block items used to protect items during shipping as well as ice chests.

Polystyrene Foam Packaging Items in Roadway Litter

Foam packaging items comprised a very small portion (0.1 percent) of *Large Litter* on roadways as shown in Table 30.

Table 30 - Polystyrene Items in Large Litter on Roadways

Large Litter Component	All	DC	MC	PGC
Polystyrene Foam Packaging - Chunks	0.1%	0.1%	0.0%	0.0%

Foam packaging items comprised a small portion (0.6 percent) of *Small Litter* on roadways, particularly in DC (0.1 percent) as shown in Table 31.

Table 31 - Polystyrene Items in Small Litter on Roadways

Small Litter Component	All	DC	MC	PGC
Polystyrene Foam Packaging - Peanuts	0.2%	0.1%	0.7%	0.5%
Polystyrene Foam Packaging - Chunks	0.4%	0.0%	2.1%	1.0%
Total	**0.6%**	**0.1%**	**2.8%**	**1.5%**

Polystyrene Foam Packaging Items in Non-Roadway Litter

Data for non-roadway sites was based on a small sampling of areas identified as litter hot spots. This data is instructive and represents materials that are problematic in the specific areas that they were observed. However, since these sites were not statistically derived, they are not expected to provide a statistical representation of overall conditions.

Polystyrene Items in Non-Roadway Litter

Foam packaging items comprised a small portion of *Large Litter* on non-roadways, more in DC (2.6 percent) than in either of the two Maryland counties as shown in Table 32.

Table 32 - Polystyrene Items in Large Litter on Non-Roadways - Summary

Large Litter Component	All	DC	MC	PGC
Polystyrene Foam Packaging - Chunks	2.3%	2.6%	1.0%	1.3%

Foam packaging items comprised a larger amount of *Small Litter* on non-roadways as shown in Table 33. Although foam packaging was a large percentage in Montgomery County non-roadway sites, this is based on a small sample size (three sites) and a small amount of litter found (15 of 45 total items).

Table 33 - Polystyrene Items in Small Litter on Non-Roadways

Small Litter Component	All	DC	MC	PGC
Polystyrene Foam Packaging - Peanuts	6.8%	0.2%	15.6%	2.7%
Polystyrene Foam Packaging - Chunks	4.2%	0.1%	17.8%	4.1%
Total	**11.0%**	**0.3%**	**33.4%**	**6.8%**

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Appendix C - Large Litter on Roadways - Montgomery County

Large Litter Category	Percent
Misc. Plastic	16.4%
Sweet Snack Wrappers (Candy, Cake)	12.4%
Construction Debris	10.9%
Paper Fast Food Napkins - Unbranded	5.7%
Plastic Straws	5.3%
Misc. Paper	4.5%
Container Lids (Plastic)	3.5%
Home Articles (Lamps, Lawn Chairs)	3.0%
Water Bottles (Plastic)	2.5%
Paper Cups (Hot)	2.4%
Stationery (School, Business)	2.4%
Snack Food Packaging (Chips)	2.4%
Plastic Cup Lids/Pieces	2.2%
Soft Drink (Cans)	1.7%
Six-Pack Plastic Rings	1.5%
Other Paper Cups	1.5%
Printed Material (Newspapers)	1.5%
Foil Fast Food Wrappers (Burger Wraps)	1.5%
Other Plastic Shells/Boxes	1.3%
Paper Straw Wrappers	0.9%
Plastic Retail Bags - No Brand Name	0.9%
Plastic Bags - Not Retail (Leaf , Trash)	0.9%
Zipper Bags/ Sandwich	0.9%
Receipts (Business, Transfers)	0.9%
Paper Clamshells	0.9%
Other Plastic Fast Food Plates	0.9%
Foil Materials/Pieces (Not Fast Food)	0.9%
Misc. Paperboard	0.9%
Beer (Cans)	0.7%
Beer Bottles (Glass)	0.7%
Sport Drink (Plastic)	0.7%
Milk/Juice (Gable Top)	0.7%
Aseptic Drink Boxes (Rectangular Box)	0.7%
Plastic Jars / Bottles (Non-Beverage)	0.7%
Glass Jars/ Bottles (Non-Beverage)	0.7%
Polystyrene Foam Cups	0.7%
Plastic Retail Bags - Brand Name	0.7%
Paper Bags - Fast Food	0.7%
Clothing or Clothing Pieces	0.7%
Cigar Butts/Tips (>4")	0.7%
Tobacco Packaging (Packs, Matches, Lighters)	0.7%

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Large Litter Category	Percent
Soft Drink (Glass)	0.0%
Soft Drink (Plastic)	0.0%
Sport Drink (Cans)	0.0%
Water Bottles (Glass)	0.0%
Wine/Liquor (Glass)	0.0%
Wine/Liquor (Plastic)	0.0%
Juice (Cans)	0.0%
Juice (Plastic)	0.0%
Juice (Glass)	0.0%
Foil Drink Pouches (Capri Sun)	0.0%
Tea (Can)	0.0%
Tea (Plastic)	0.0%
Broken Container Glass	0.0%
Cans - Steel (Food/Non-Food)	0.0%
Cans - Aluminum (Non-Beverage)	0.0%
Container Lids (Metal)	0.0%
Aerosol Cans (Paint, Oils, Etc.)	0.0%
Plastic Drink Cups	0.0%
Paper Cups (Cold)	0.0%
Polystyrene Foam Clamshells	0.0%
Polystyrene Foam Fast Food Plates	0.0%
Polystyrene Foam Trays (Meat, etc.)	0.0%
Polystyrene Foam Chunks	0.0%
Plastic Packaging - Other (Film, etc.)	0.0%
Plastic Wrap (Retail Food/Non-Food)	0.0%
Paper Retail Bags - Brand Name	0.0%
Paper Retail Bags - No Brand Name	0.0%
Paper Bags - Not Retail (Leaf, etc.)	0.0%
Corrugated Boxes/Pieces	0.0%
Paperboard (Cereal , Shoe Boxes)	0.0%
Lottery Ticket Debris	0.0%
Paper Packaging - Other	0.0%
Paper Beverage Cases (6/12 pack)	0.0%
Paper Fast Food Napkins - Branded	0.0%
Paper Trays	0.0%
Paper Fast Food Plates	0.0%
Paper Food Wrap (Meat Wrap)	0.0%
Condiment Package (Salt, Ketchup)	0.0%
Utensils & Chopsticks (Plastic)	0.0%
Utensils & Chopsticks (Wooden)	0.0%
Utensils (Metal)	0.0%
Plates - Other Materials	0.0%
Trays - Other Materials	0.0%

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Large Litter Category	Percent
Foil Containers (Ice Cream)	0.0%
Gum Wrappers	0.0%
Food Items (Apple Core, etc.)	0.0%
Other Cloth (Rugs, Rags, Tarps, etc.)	0.0%
Cigarette Debris (>4")	0.0%
Misc. Cardboard	0.0%
Misc. Glass	0.0%
Vehicle & Metal Road Debris	0.0%
Composite Materials - Other	0.0%
Tire & Rubber Debris	0.0%

Appendix G - Small Litter on Roadways - Montgomery County

Small Litter Category	Percent
Paper	38.6%
Cigarette Butts	18.6%
Candy/Gum Wrappers	8.5%
Plastic Film	7.0%
Bottle Caps	6.9%
Hard Plastic	4.7%
Tobacco Packaging, etc.	4.0%
Cigar Butts/Tips	3.7%
Polystyrene Foam Packaging - Chunks	2.1%
Aluminum	1.4%
Rubber/Tire Pieces	1.4%
Straws/Wrappers - Paper	0.8%
Metal (not Aluminum)	0.7%
Other Materials (Describe)	0.7%
Polystyrene Foam Packaging - Peanuts	0.7%
Food	0.0%
Glass	0.0%
Polystyrene Foam Food - Cups/Plates/Clams	0.0%
Straws - Plastic	0.0%

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Appendix K- Large Litter on Non-Roadways - Montgomery County

Large Litter Category	Percent
Stationery (School, Business)	57.7%
Plastic Packaging - Other (Film, etc.)	5.8%
Sweet Snack Wrappers (Candy, Cake)	5.8%
Construction Debris	4.8%
Polystyrene Foam Cups	2.9%
Beer Bottles (Glass)	1.9%
Misc. Plastic	1.9%
Plastic Retail Bags - No Brand Name	1.9%
Polystyrene Foam Clamshells	1.9%
Beer (Cans)	1.0%
Composite Materials - Other	1.0%
Foil Fast Food Wrappers (Burger Wraps)	1.0%
Gum Wrappers	1.0%
Juice (Cans)	1.0%
Misc. Cardboard	1.0%
Misc. Glass	1.0%
Other Plastic Shells/Boxes	1.0%
Paper Fast Food Napkins - Unbranded	1.0%
Plastic Bags - Not Retail (Leaf , Trash)	1.0%
Plastic Retail Bags - Brand Name	1.0%
Plastic Wrap (Retail Food/Non-Food)	1.0%
Polystyrene Foam Chunks	1.0%
Printed Material (Newspapers)	1.0%
Snack Food Packaging (Chips)	1.0%
Vehicle & Metal Road Debris	1.0%
Aerosol Cans (Paint, Oils, Etc.)	0.0%
Aseptic Drink Boxes (Rectangular Box)	0.0%
Broken Container Glass	0.0%
Cans - Aluminum (Non-Beverage)	0.0%
Cans - Steel (Food/Non-Food)	0.0%
Cigar Butts/Tips (>4")	0.0%
Cigarette Debris (>4")	0.0%
Clothing or Clothing Pieces	0.0%
Condiment Package (Salt, Ketchup)	0.0%
Container Lids (Metal)	0.0%
Container Lids (Plastic)	0.0%
Corrugated Boxes/Pieces	0.0%
Foil Containers (Ice Cream)	0.0%
Foil Drink Pouches (Capri Sun)	0.0%
Foil Materials/Pieces (Not Fast Food)	0.0%
Food Items (Apple Core, etc.)	0.0%

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Large Litter Category	Percent
Glass Jars/ Bottles (Non-Beverage)	0.0%
Home Articles	0.0%
Juice (Glass)	0.0%
Juice (Plastic)	0.0%
Lottery Ticket Debris	0.0%
Milk/Juice (Gable Top)	0.0%
Misc. Paper	0.0%
Misc. Paperboard	0.0%
Other Cloth (Rugs, Rags, Tarps, etc.)	0.0%
Other Paper Cups	0.0%
Other Plastic Fast Food Plates	0.0%
Paper Bags - Fast Food	0.0%
Paper Bags - Not Retail (Leaf, etc.)	0.0%
Paper Beverage Cases (6/12 pack)	0.0%
Paper Clamshells	0.0%
Paper Cups (Cold)	0.0%
Paper Cups (Hot)	0.0%
Paper Fast Food Napkins - Branded	0.0%
Paper Fast Food Plates	0.0%
Paper Food Wrap (Meat Wrap)	0.0%
Paper Packaging - Other	0.0%
Paper Retail Bags - Brand Name	0.0%
Paper Retail Bags - No Brand Name	0.0%
Paper Straw Wrappers	0.0%
Paper Trays	0.0%
Paperboard (Cereal , Shoe Boxes)	0.0%
Plastic Cup Lids/Pieces	0.0%
Plastic Drink Cups	0.0%
Plastic Jars / Bottles (Non-Beverage)	0.0%
Plastic Straws	0.0%
Plates - Other Materials	0.0%
Polystyrene Foam Fast Food Plates	0.0%
Polystyrene Foam Trays (Meat, etc.)	0.0%
Receipts (Business, Transfers)	0.0%
Six-Pack Plastic Rings	0.0%
Soft Drink (Cans)	0.0%
Soft Drink (Glass)	0.0%
Soft Drink (Plastic)	0.0%
Sport Drink (Cans)	0.0%
Sport Drink (Plastic)	0.0%
Tea (Can)	0.0%
Tea (Plastic)	0.0%
Tire & Rubber Debris	0.0%

2014 Anacostia Watershed Litter Survey

Large Litter Category	Percent
Tobacco Packaging (Packs, Matches, Lighters)	0.0%
Trays - Other Materials	0.0%
Utensils & Chopsticks (Wooden)	0.0%
Utensils & Chopsticks (Plastic)	0.0%
Utensils (Metal)	0.0%
Water Bottles (Glass)	0.0%
Water Bottles (Plastic)	0.0%
Wine/Liquor (Glass)	0.0%
Wine/Liquor (Plastic)	0.0%
Zipper Bags/ Sandwich	0.0%

2014 Anacostia Watershed Litter Survey

Appendix S - List of Roadway Sites

#	Tract	Site Location	Area	Start
1	23.01	2nd Street	NW	Varnum Street toward Webster Street
2	23.01	Allison Street	NW	5th Street toward 4th Street
3	28.02	Monroe Street	NW	50 feet from Corner of 16th Street going east
4	28.02	Park Road	NW	50 feet from Corner of 16th Street going east
5	28.02	Hiatt Place	NW	Park Road going south
6	28.02	Irving Street	NW	15th Street going east
7	30	Kenyon Street	NW	13th Street going west toward 14th Street
8	31	Morton Street	NW	50 feet past Corner of Sherman Avenue east
9	33.01	Channing Street	NW	50 feet from Corner of North Capitol Street west
10	33.01	1st Street	NW	W Street north toward Adams Street
11	33.02	T Street	NW	50 feet from 1st Street going east
12	33.02	Quincy Place	NW	North Capitol Street going west
13	36	13th Street	NW	Euclid Street north toward Fairmont Street
14	37	Fuller Street	NW	16th Street toward 15th Street
15	43	Caroline Street	NW	16th Street toward 15th Street
16	43	U Street	NW	15th Street toward 14th Street
17	44	12th Street	NW	W Street toward V Street
18	47.01	Pierce Street	NW	New Jersey Avenue toward 1st Street
19	48.01	Wiltberger Street	NW	T Street south toward S Street
20	50.01	Rhode Island Avenue	NW	12th Street west toward Vermont Avenue
21	59	F Street	NW	4th Street west
22	65	F Street	SE	1st Street toward 2nd Street
23	67	13th Street	SE	100 Feet North on Independence Avenue
24	67	Walter Street	SE	12th Street toward 13th Street
25	70	E Street	SE	8th Street toward 10th Street
26	70	7th Street	SE	G Street toward E Street
27	72	Fourth Street	SE	Water Street west
28	73.04	Mississippi Avenue	SE	15th Street west
29	73.04	Anderson Place	SE	15th Street east
30	74.06	Sheridan Road	SE	Pomeroy Road north
31	74.06	Douglas Road	SE	Douglas Place east
32	74.07	Sheridan Road	SE	Howard Road northeast toward Morris Road
33	74.08	Alabama Street	SE	Knox Street south toward Irving Street
34	76.05	23rd Street	SE	S Street south
35	77.07	Burns Street	SE	Hilldreth Street south
36	77.08	Dubois Place	SE	34th Street west toward 33rd Street
37	77.09	Fairlawn Avenue	SE	N Street north toward Nash Place
38	78.09	Jay Street	NE	50th Place east toward 51st Street
39	79.01	17th Street	NE	Gales Street south toward F Street
40	79.01	Isherwood Street	NE	15th Street east toward 17th Street
41	80.01	E Street	NE	13th Street toward 14th Street
42	81	11th Street	NE	C Street toward Constitution Avenue
43	82	3rd Street	NE	A Street north toward Constitution Avenue

2014 Anacostia Watershed Litter Survey

#	Tract	Site Location	Area	Start
44	83.01	4th Street	NE	G Street south toward F Street
45	83.01	D Street	NE	3rd Street east toward 4th Street
46	83.02	Lexington Place	NE	7th Street west toward 6th Street
47	84.1	K Street	NE	9th Street toward 10th Street
48	84.1	I Street	NE	11th Street toward 12th Street
49	87.01	Uhland Terrace	NE	Summit Place toward 2nd Street
50	87.01	R Street	NE	Lincoln Road east
51	88.02	Morse Street	NE	Montello Avenue east
52	88.04	Meigs Place	NE	Trinidad Avenue west toward Montello Avenue
53	93.02	Franklin Street	NE	13th Street toward 12th Street
54	94	South Dakota Avenue	NE	Quincy Street southeast
55	95.04	Rock Creek Church Road	NE	200 feet south from Riggs Road
56	95.08	Galloway Street	NE	7th Street toward 8th Street
57	96.02	Hayes Street	NE	Anacostia Avenue northwest
58	99.03	Ayers Place	SE	55th Street east toward 56th Street
59	99.03	58th Street	SE	East Capital Street south
60	99.07	Falls Terrace	SE	Alabama Avenue east
61	110	O Street	SW	4th Street east
62	110	6th Street	SW	M Street south toward Water Street
63	103	Elder Street	NW	7th Street west toward 8th Street
64	88.02	Oates Street	NE	100 feet East of Montello Avenue
65	43	Waverly Terrace	NW	U Street toward Paloma Way
66	23.01	Illinois Avenue	NW	Upshur Street south toward Taylor Street
67	7016.01	I-495 Exit	MC	Off of New Hampshire Avenue
68	7016.02	Oakview Drive	MC	Bus stop near corner of Braddock Road
69	7019	Clayborn Avenue	MC	Traffic circle toward Garland Avenue
70	7021.01	E. Franklin Avenue	MC	School driveway toward the bus stop
71	7024.02	Easley Drive	MC	Parking lot after driveway to industrial site
72	7032.15	Route 182	MC	Corner directly south of Bel Pre Road
73	7032.21	Park Vista Drive	MC	South of traffic circle to Wingate Drive
74	7034.02	Hathaway Drive	MC	Directly south of Georgia Avenue
75	7020	Parking Lot	MC	Carroll Avenue at University Boulevard East
76	8024.04	Walker Mill Road	PGC	Before Addison Road south split
77	8028.03	Brooke Road	PGC	Bus stop in front of recreation center south
78	8031	Columbia Park Road	PGC	Near turn-in to Cheverly Metro Station
79	8056.01	University Boulevard East	PGC	Near corner of New Hampshire Avenue
80	8059.06	Erie Street	PGC	Past 20th Avenue east toward Adelphi Road
81	8059.07	Northampton Drive	PGC	Turning south onto New Hampshire Avenue
82	8066.01	Riverdale Road	PGC	East from corner of frontage road to I-295
83	8067.11	Greenbelt Road	PGC	Corner with Cipriano Road
84	8068	Kenilworth Avenue	PGC	South from corner of Pontiac Street

2014 Anacostia Watershed Litter Survey

Appendix T - List of Non-Roadway Sites

#	Tract	Site Location
1	DC-1	Hickey Run south of Route 50 New York Avenue NE
2	DC-2	James Creek Discharge at Buzzard Point SW
3	DC-3	Nash Run at 295 south where it is open channel
4	DC-4	Oxon Run at South Capitol Street SE
5	DC-5	Open channel at Pope's Branch near Fairlawn Avenue & M Street SE before I-295
6	DC-6	Railroad tracks at Queen's Chapel Road North under bridge
7	PG-1	Drainage ditch prior to trash rack near 4601 Annapolis Road in Bladensburg
8	PG-2	Open channel discharge at Home Depot near East West Highway
9	PG-3	Drainage outfalls at Watts Branch off Southern Avenue SE
10	MC-1	Sligo Creek bed near Sligo Creek Parkway
11	MC-2	Anacostia Tributary Trail next to Sligo Creek
12	MC-3	Sligo Creek and Creek bed near Sligo Cabin Neighborhood Park

ANACOSTIA WATERSHED SOCIETY

January 14, 2015

Councilmember Hans Riemer
Montgomery County Council
100 Maryland Ave
Rockville MD 20850

Dear Councilmember Riemer:

The Anacostia Watershed Society (AWS) has reviewed the *2014 Anacostia Watershed Litter Survey* from Environmental Resources Planning, LLC and finds it of little relevance to the issues before the council regarding Bill 41-14 to ban single use expanded polystyrene products.

The new litter study and methodology focuses on roadside litter which is quite different in composition and impact from trash that is found in substantial quantities in our streams and river, for which there is a legal mandate to reduce (Anacostia River Trash TMDL).

The trash that we remove from the river washes from our parking lots, roads and sidewalks directly into catchment basins and through the stormwater collection system, and is discharged directly to streams. This is influenced by, though not at all dependent upon, roadside trash.

Expanded polystyrene (often referred to as Styrofoam or plastic foam) is lightweight, bulky and floats on water. It breaks down into smaller and smaller pieces over time and distance. Those pieces do not decompose, but persist in the environment for hundreds of years causing numerous problems, including the accumulation of pollutants ingested by marine life.[1]

Because of the bulky, lightweight and floatable nature of plastic foam, volume analysis is more important than comparing the number of pieces (the methodology of the litter study). AWS has been conducting monthly volume analysis of floatable and submerged trash strained from the flowing waters of Nash Run, a tributary of the Anacostia River, for five years. The average amount of expanded Polystyrene is 18 percent of the trash removed by the trash trap (28 percent last November and as high as 37 percent in December 2011). Almost all plastic foam items found in the stream are cups, plates, and clamshells related to food and beverage service. This is a real problem that we are convinced will be reduced as a result of this legislation.

From our work over the past 25 years on trash issues in the Anacostia River and its many tributaries in Montgomery County, including Sligo Creek and the Northwest Branch, AWS has extensive experience with documenting trash, removing it from

waterways, and helping to develop and evaluate trash reduction policies in area jurisdictions and in Maryland.

Our work and that of partners and collaborators has been important to the development and implementation of a Trash TMDL for the Anacostia River by the U.S. EPA that requires local agencies to develop comprehensive plans that will substantially reduce trash in the river. We applaud Montgomery County for its past and continuing work on this important and challenging problem, including the legislation under consideration which focuses on reducing litter at its source. Our strategy is to focus on policies like this to get us all out of the litter business.

This industry-funded study does confirm our experience that we have an extensive problem with beverage container trash. We urge the council and county executive to work with area jurisdictions and the state to effectively address that problem, including consideration of instituting a state bottle deposit program.

The Anacostia Watershed Society affirms our full support for Bill 41-14 to ban some expanded polystyrene products that is now being considered by the Montgomery County Council.

Thank you for your consideration and please feel free to contact us with any questions.

Sincerely,

Dan Smith

Dan Smith
Director of Public Policy and Advocacy
Anacostia Watershed Society

[1]*Double Trouble: Marine Plastic Debris Absorbs Toxic Pollutants*, By Carrie McDonough, *Oceanbites*, University of Rhode Island, December 30, 2013. http://oceanbites.org/double-trouble-marine-plastic-debris-interacts-with-toxic-pollutants/

De Blasio Administration Bans Single-Use Styrofoam Products in New York City Beginning July 1, 2015

January 8, 2015

Department of Sanitation Determines Expanded Polystyrene Foam Not Recyclable

NEW YORK – The de Blasio Administration today announced that as of July 1, 2015, food service establishments, stores and manufacturers may not possess, sell, or offer for use single service Expanded Polystyrene (EPS) foam articles or polystyrene loose fill packaging, such as "packing peanuts" in New York City.

After consultation with corporations, including Dart Container Corporation, non-profits, vendors and other stakeholders, the Department of Sanitation (DSNY), has determined that Expanded Polystyrene (EPS) Foam cannot be recycled, which led to the ban. DSNY also determined that there currently is no market for post-consumer EPS collected in a curbside metal, glass, and plastic recycling program. As a result of the ban, manufacturers and stores may not sell or offer single-use foam items such as cups, plates, trays, or clamshell containers in the City. The sale of polystyrene loose fill packaging, such as "packing peanuts" is also banned.

"These products cause real environmental harm and have no place in New York City. We have better options, better alternatives, and if more cities across the country follow our lead and institute similar bans, those alternatives will soon become more plentiful and will cost less," said **Mayor Bill de Blasio**. "By removing nearly 30,000 tons of expanded polystyrene waste from our landfills, streets and waterways, today's announcement is a major step towards our goal of a greener, greater New York City."

"While much of the waste we produce can be recycled or reused, polystyrene foam is not one of those materials," said **Sanitation Commissioner Kathryn Garcia**. "Removing polystyrene from our waste stream is not only good for a greener, more sustainable New York, but also for the communities who are home to landfills receiving the City's trash."

"NYC is now the largest city in the country to ban EPS foam, and we hope this will inspire others to do the same. This ban will improve our rivers and waterfront and ultimately the Atlantic Ocean with its rich fisheries and marine life," said **Director of the Mayor's Office of Sustainability Nilda Mesa**. "The ban on EPS foam products marks another step forward as we work toward an even greener, more sustainable NYC -- from cleaner air and dramatically reduced emissions, to now ending the sale and use of non-biodegradable products like EPS

foam. As New Yorkers, we all breathe the same air and drink from the same water supply; we must leave a legacy that will make our kids proud."

The determination was made after considering environmental effectiveness, economic feasibility, and safety for employees of DSNY and Sims Municipal Recycling, the City's recycling processor. The analysis was based on a recycling strategy that would have incorporated EPS into the current metal, glass, plastic & carton commingled collection program and that would not create a separate collection or sorting program.

Local Law 142, passed by the City Council in December 2013, required the sanitation commissioner to determine "whether EPS single service articles can be recycled at the designated recycling processing facility at the South Brooklyn Marine Terminal in a manner that is environmentally effective, economically feasible, and safe for employees." Under the law, if EPS is not found to be recyclable, it must be banned.

The law allows businesses a six month grace period from when the law goes into effect – January 1, 2016 – before fines can be imposed. DSNY, the Department of Health and Mental Hygiene, and the Department of Consumer Affairs will conduct outreach and education in multiple languages to businesses throughout all five boroughs during this period. For the first year of the ban, businesses will be given a warning in lieu of a fine.

Non-profits and small businesses with less than $500,000 in revenue per year may apply for hardship exemptions from the Department of Small Business Services (SBS) if they can prove that the purchase of alternative products not composed of EPS would create undue financial hardship. SBS will begin accepting applications for hardship waivers in March 2015.

In accordance with the City's new policy, DOE will begin replacing foam trays with compostable plates on May 1st. All school meals will be served on these compostable plates starting in September. All summer meals will also be served on compostable plates.

"DOE is excited to be part of the City's new environmentally conscious polystyrene policy," said **Schools Chancellor Carmen Fariña**. "We are replacing polystyrene trays with compostable plates for the 2015 – 16 school year to meet this ban."

"For too long polystyrene foam has been mischaracterized as a safe, and economically sound choice for packaging when it is in fact a great threat to the city's ecosystem and our commitment to environmental sustainability," said **Council Member Donovan Richards, Chair to the Committee on Environmental Protection**. "I applaud the mayoral administration's decision to finally ban the use of plastic foam, and look forward to the widespread use of renewable and recyclable materials for packaging."

"As Chair of the Committee on Sanitation, I firmly believe and have made every effort to ensure that the Department of Sanitation recycles or reuses as many materials as possible. However, I support the Administration's determination that polystyrene foam cannot be recycled, and look forward to working with the City to do aggressive outreach to businesses and non-profits about this new law," said **Antonio Reynoso, Council Member, Chair of Sanitation Committee**.

"We wholeheartedly support the Council's continued commitment to environmental responsibility by banning plastic-foam. We have received data confirming harmful effects of Styrofoam on our environment which proves it is impossible to recycle. New York City will now join dozens of other cities nationwide making this smart move, and we can today be a positive example to many other cities considering this ban. We see a responsibility to future generations to reduce harmful substances such as thermoplastic petrochemicals from our landfills," stated **the Black, Latino and Asian Caucus of the New York City Council**.

"We welcome the de Blasio administration's decision to move forward with a prohibition on polystyrene foam cups and food containers – a move that is economically justified and environmentally sound. Sanitation Commissioner Kathryn Garcia's determination will mean cleaner streets and parks, and less pollution in our waterways. And restaurant owners and food vendors here will transition to more environmentally friendly food and beverage containers, just as they have in more than 100 jurisdictions around the country where similar bans have already been adopted," said **Eric A. Goldstein, New York City Environment Director at the Natural Resources Defense Council**.

"The New York State Restaurant Association appreciates the efforts of the NYC Department of Sanitation and the Mayor's Office to enact legislation that moves our industry toward sustainability while recognizing the needs of small businesses via a long transition period and a commitment to educate businesses on alternatives before fining them, said **Chris Hickey, Regional Director NYC of the New York State Restaurant Association**. "We look forward to working with the City to educate restaurants on how to comply with the law and helping them find alternative products that are better for the environment and cost effective."

"This is an important victory for New Yorkers committed to reducing global warming, to reducing the volume of trash we generate, and to reducing the taxes we all pay to collect, transport and dispose of our trash," said **Peter H Kostmayer, CEO Citizens Committee for New York City**.

"Based on the Sanitation Commissioner's finding, the City is making the right choice to ban these products. We welcome the support from the Mayor and the City Council to move in this direction as part of an ever more robust recycling program," said **James T. B. Tripp, Senior Counsel, Environmental Defense Fund.**

"Sustainable South Bronx expresses our unwavering support of the citywide ban on polystyrene food and beverage containers and packaging. We have seen firsthand the detrimental impact that polystyrene has had on our waste stream here in the South Bronx and in low-income communities throughout the city. Since polystyrene is virtually impossible to recycle, its abundance serves as an inhibitor to increasing the City's recycling rates. We applaud the City's efforts and we believe that the ban will minimize the many negative health and environmental impacts that polystyrene imposes on communities such as the South Bronx," said **Michael Brotchner, Executive Director, Sustainable South Bronx.**

"Through great leadership and vision, the New York City Council's ban on styrofoam can now move forward, thanks to diligent confirmation that polystyrene is non-recyclable", said **Roger**

Downs, Conservation Director for the Sierra Club Atlantic Chapter. "Styrofoam is a persistent blight upon our parks and beaches, endangers marine wildlife and unnecessarily costs tax payers millions of dollars annually in disposal expenses. We look forward to the environmental and economic benefits that will come with this historic policy."

"Getting rid of Styrofoam is just terrific news for recyclers, for composters, for taxpayers, and for all living beings that depend on having a healthy ocean—that is to say, all of us," said **Brendan Sexton, Chair, Manhattan Solid Waste Advisory Board**. "Well done, Commissioner Garcia and Mayor de Blasio!"

"We are excited to learn that the city administration has taken the final step to allow legislation to go forward that will ban the sale of styrofoam products in New York City. Styrofoam products contribute an estimated 20,000 tons of waste to our waste stream, in NYC schools alone over 830,000 foam lunch trays are used every day. In the school setting, this ban is a perfect opportunity to implement a shift away from single use to durable items, eliminating wastefulness and teaching an important lesson to the next generation," said **Christine Datz-Romero, Executive Director of the Lower East Side Ecology Center**.

"This landmark decision to ban toxic and polluting styrene foam products is a huge grassroots victory for our children and our communities," said **Debby Lee Cohen, Director/Founder of Cafeteria Culture, founded as Styrofoam Out of Schools**. "We applaud Mayor de Blasio for his longtime dedication to eliminating styrene foam, bringing us one step closer to becoming a zero-waste, climate-smart city!"

"We must move decisively away from the era in which scarce resources are extracted from the earth, turned into products that may be used for no more than a few minutes, and then trashed without reusing or recycling the materials--and ubiquitous polystyrene foam is one of the prime example of this wasteful practice," said **Assemblymember Brian Kavanagh, who chairs the NYS Caucus of Environmental Legislators and has sponsored legislation to restrict EPS use for food service statewide.** "The City deserves great credit for following through on this critical step toward a cleaner more sustainable New York!"

"New York City has long been a leader on cleaning up the urban environment and this legislation is a bold statement and reaffirmation of our city's commitment to environmental stewardship and responsibility. Banning single-use ESP products recognizes that we simply cannot afford to pollute our environment with EPS foam, which cannot be recycled, for the convenience of using Styrofoam plates or cups." said **Senator Tony Avella.**

About EPS:

- Expanded polystyrene is a plastic resin manufactured into consumer products such as "foam" cups, containers, trays, plates, clamshell cases and egg cartons.
- DSNY collected approximately 28,500 tons of expanded polystyrene in Fiscal Year 2014 and estimates that approximately 90 percent of that is from single-use food service products like cups, trays and containers.
- EPS is a major source of neighborhood litter and hazardous to marine life. EPS foam is a lightweight material that can clog storm drains and can also end up on our beaches and

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in New York Harbor. EPS containers can break down into smaller pieces, which marine animals may mistake for food. The environmental assessment prepared for the bill found that expanded polystyrene particles can wind up in the harbor, and in the floating gyre of non-biodegradable plastic debris that has been found in the Atlantic Ocean – creating a hazard for marine life such as sea turtles and fish.

- EPS is a contaminant of the city's organics program. The presence of EPS foam in NYC's waste stream has a detrimental effect on the City's organic collection program. During the collection process, foam can break down into small pieces that get mixed in with and contaminates organic material, rendering it unmarketable for anaerobic digestion or composting.
- EPS is already banned in cities across the country, including Washington, DC, Minneapolis, San Francisco, Oakland, Portland, Albany, and Seattle. In total, more than seventy cities have banned foam and businesses large and small have shifted to alternative products that are biodegradable or otherwise recyclable.

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