About this Guide

The Responsible Purchasing Guide for Food Containers: A Companion to the Responsible Purchasing Guide for Food Services is published by the Responsible Purchasing Network in print, as a PDF file, and on the web. Print and PDF copies are available to the public. The online edition includes additional resources, including: searchable product listings, multiple policy and specification samples, comparisons of standards, and related documents. Visit www.ResponsiblePurchasing.org to purchase a copy or to access the web-based edition of the Guide.

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About the Responsible Purchasing Network

The Responsible Purchasing Network (RPN) was founded in 2005 as the first national network of procurement-related professionals dedicated to socially and environmentally responsible purchasing. RPN is a program of the Center for a New American Dream (www.newdream.org) and guided by a volunteer Steering Committee of leading procurement stakeholders from government, industry, educational institutions, standards setting organizations, and non-profit advocacy organizations.

Acknowledgements

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This Guide is a companion to the <u>Responsible Purchasing Guide for Food Services</u>. RPN has prepared this Responsible Purchasing Guide for Food Containers for the County of Los Angeles. In May 2007, the County Board of Supervisors directed the Department of Public Works, in consultation with the County Counsel and Internal Services, to investigate the impact of prohibiting the purchase and use of food containers made from expanded polystyrene (EPS) at all County-owned facilities, County offices, County-managed concessions, County-permitted events, and County-sponsored events.

This Guide serves to outline the basic social and environmental issues and costs related to polystyrene food container use, provide model policies and bid specs related to food containers, and address practical issues in waste management related to food containers.

For a more thorough analysis of other food service operations and products, please see the <u>Responsible Purchasing Guide for Food Services</u>.

To help RPN continue to provide guides like this one and other leading edge resources on green purchasing, please visit <u>www.newdream.org</u> and give to the <u>Center for a New American Dream</u>.

Food containers have impacts on air and water quality, solid waste management, street litter, and human health.

AIR QUALITY

Greenhouse gas (GHG) emissions occur in every phase of a food container's lifecycle. However, according to the life cycle analyses comissioned by RPN for the County of Los Angeles, the method of disposal is the biggest factor in determining the comparative emissions footprint of various food service containers. In the majority of end-of-life scenarios, EPS containers result in greater GHG emissions when compared to reusable, biodegradable, and recyclable food containers. For each waste management strategy evaluated (i.e. composting, recycling, or landfilling) there is a food container product available with equal or lesser associated GHG emissions than EPS containers.

SOLID WASTE

The California Integrated Waste Management Board's (CIWMB) report, Use and Disposal of Polystyrene in California: A Report to the California Legislature, aptly summarizes the solid waste issues associated with EPS food containers as follows: "Food service PS [polystyrene], by its nature, has a useful life that can be measured in minutes or hours. Yet, it takes several decades to hundreds of years to deteriorate in the environment or landfill. Food service PS also represents a significant challenge as litter. Not only does the food service PS break into smaller pieces that may be ingested by wildlife, but materials may also be contaminated with food that decays, creating a health hazard." (CIWMB)

LANDFILL AND INCINERATION Singleuse disposable food serviceware items (e.g., cups, bowls, plates, trays, clamshells, forks, spoons, knives and straws) are typically made from various types of petroleum-based plastics, paper, or expanded polystyrene (EPS, more commonly known by the brand name StyrofoamTM). California alone produced 377,579 tons of polystyrene, including 166,135 tons of food service packaging, in 2001 (CIWMB). Los Angeles County purchases approximately 150,000 pounds or about 16 million EPS food containers every year.

According to CIWMB, "Polystyrene (PS) is estimated at 0.8 percent (by weight) of the materials landfilled. However, due to its lightweight nature, its volume is much greater." EPS only weighs less than 10 pounds per cubic yard; it can take up over 10 times more space per pound than cardboard. Furthermore, because EPS food containers are with food often contaminated residue. recycling is not common. Based on industry reports, CIWMB acknowledges, "There is no meaningful recycling of food service PS." In the absence of a recycling market, if disposed of properly and not littered, these products end up in landfills, which ultimately release hazardous emissions. Petroleum-based plastics like EPS degrade or decompose very slowly, potentially remaining intact for hundreds of years, affecting surrounding ecosystems and occupying scarce land. When incinerated, these products contribute to emissions such as sulfur dioxide (SO2), dioxins, particulates, carbon dioxide (CO2) and nitrogen dioxide (NO2). Similar air and water pollution issues exist for other disposable products that are landfilled or incinerated, as well.

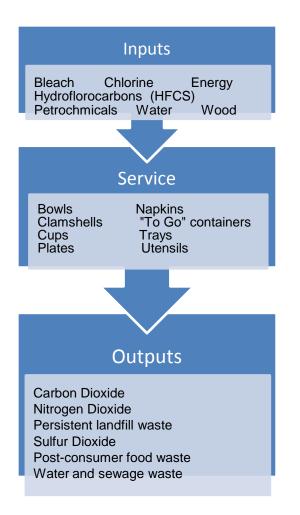


Figure 1 Summary of the Inputs and Outputs Related to Food Containers

LITTER

EPS food containers are predominantly used containers, as "to-go" and are often improperly disposed of by consumers and blown or washed away by wind or water, or picked up and transported by animals from landfills and trashcans. These products are not recycled because they lack durability and are often covered in food by the time they reach the trash can. As a result, EPS food containers have become a serious waste management issue, accumulating in water systems, affecting wildlife and degrading water quality. Banning such food containers can alleviate the problem. San Francisco's foam container ban resulted in a 36% reduction of polystyrene street litter after the first year it was implemented (CWA).

Plastics like polystyrene are a serious pollutant in oceans, rivers, and wetlands. Studies show that the 60-80% of all marine debris and 90% of floating marine debris is The plastic. California Department of Transportation found that polystyrene represented 15 percent of the total volume of litter recovered from storm drains (CIWMB). Storm drains flow into natural waterways and ultimately into the ocean, increasing exposure of wildlife to contaminants and litter. EPS and other plastics account for the biggest percentage of waste on Santa Monica's beaches. On one annual Coastal Clean up day, 10,000 volunteers collected 75,000 pounds of predominantly PS and plastic trash from the city's beaches (Santa Monica).

Ocean currents are converging much of this buoyant plastic trash in an area in the Pacific called the North Pacific Gyre. The huge, but amorphous, region north of Hawaii is now commonly referred to as the Great Pacific Garbage Patch (NOAA). Debris from the Los Angeles River and San Gabriel River watersheds is a significant contributor to the Great Pacific Garbage Patch, as well as to trash accumulating on beaches and in waterways around the world (Gordon 23-24).

Floating and sub-surface plastic trash affects wildlife all along the food chain. Patches of floating debris can inhibit the growth of aquatic plants, in turn degrading spawning areas and habitats for fish and other aquatic animals. Organisms as small as zooplankton ingest the plastic fragments, such as EPS fragments. Birds, turtles, and other riparian wildlife are known to swallow plastic and feed it to their young, mistaking it for food (Gordon 23-24). Mammals looking for fish eggs, accidently eat plastic resin pellets, also known as nurdles (AMRF). As a result, these animals become malnourished and sometimes poisoned by the litter they eat. The EPA reported on the adverse effects of plastic pellets (the feedstock for plastic and EPS product manufacturing) as early as 1992 (EPA). Because plastic and EPS remain intact, their contribution to the litter problem is amplified as pollution continues over time.

HAZARDOUS SUBSTANCES AND HUMAN HEALTH

New studies show that hazardous chemicals added to plastics during the manufacturing process, such as nonylphenols, polybrominated diphenyl ethers (PBDEs), phthalates, and bisphenol A (BPA), may be carried or absorbed by plastic particles and released by plastic debris, potentially harming wildlife and humans wherever it goes (AMRF). On a scale of concern ranging from negligible, minimal, some, to serious, the National Toxicology Program concluded that they have "some concern for effects on the brain, behavior, and prostate gland in fetuses, infants, and children at current human exposures to bisphenol A" and "minimal concern for effects on the mammary gland and an earlier age for puberty for females in fetuses, infants, and children at current human exposures to bisphenol A" (NTP). Some PBDEs are listed by the US EPA as possible human carcinogens (ASTDR). These are just some of the health risks that have been linked to the additives in the plastics floating in waterways and washing up on beaches.

Polystyrene, the plastic that is foamed to produce EPS food containers, is itself a harmful substance. It can break down into its styrene building blocks in the manufacture, use, and disposal of styrene-based products. A possible human carcinogen and neurotoxin, styrene has been found in food packaged in polystyrene (EPA 2000). Studies show that persons chronically exposed to styrene, as may be the case for many of California's 150,000 plastics industry workers, which includes over 4,000 individuals working in the polystyrene foam manufacturing sector, are at increased risk depression, headache, for fatigue, weakness, kidney dysfunction and cancer (CIWMB, US Census)

🖓 Best Practices

The steps outlined below reflect green purchasing best management practices and lessons learned in RPN's investigation of Los Angeles County's use of and expenditures on EPS food containers. Use these steps in conjunction with best practices from the Responsible Purchasing Guide for Food Services.

MEASURE AND MONITOR

Establish a system to measure and compare the human, environmental, and fiscal impacts related to your procurement, use and disposal of food serviceware. First, conduct an inventory of the food serviceware products currently being used by each facility and identify their current disposal methods. Using this data, estimate the Total Cost of Ownership (TCO) for these goods. Include factors such as purchase price, maintenance, cleaning, and disposal, and attempt to calculate the overall human and environmental impacts of these products. Download our sample Serviceware Tracking spreadsheet.

Consider conducting Life Cycle Assessments (LCAs) for each type of food container used, or refer to existing studies such as the one Los Angeles County and RPN commissioned. More information available online is at www.ResponsiblePurchasing.org. Sometimes vendors can provide LCAs and/or other human health and environmental studies related to their products. Seek studies that were conducted by independent external entities who follow ISO guidelines rather than by manufacturers or suppliers with a vested interest in the outcome. Use the Serviceware and Composting Calculators in the <u>Calculators</u> section of this Guide to help approximate multiple financial and environmental costs associated with serviceware use and disposal.

Smaller institutions may be able to gather this information via site visits. Large organizations with many facilities and operations may be required to survey key staff such as purchasing agents, dining services managers, or waste management personnel. Make the questionnaire as specific as possible, so as to ensure the most accurate and complete data. See the <u>Addendum</u> for a revised version of the questionnaire used to evaluate the EPS food container use of over 400 Los Angeles County operations.

TRAYLESS DINING

Consider reducing or eliminating the use of trays. A study of 25 food service institutions conducted by Aramark reports that eliminating serving trays reduces per person food waste by 25-30% and decreases water use by about a half gallon per tray per meal (Aramark 2008).

COMPOSTABLEANDRECOVEREDCONTENTSERVICEWAREANDCONTAINERS

Use reusable, compostable, recycled, and recyclable tableware, glassware, and containers rather than single use items made from limited or sensitive natural resources such as petroleum and trees. Often, the most cost effective strategy (including extra staff time for loading dishwashers) is to purchase and wash reusable/durable serviceware. For takeout service, compostable serviceware and becoming containers are increasingly available, made from agricultural waste or quickly renewable natural resources such as corn or potato starch, polylactic acid, bamboo, coconut, sugarcane fiber and starch. When biodegradable choosing or compostable products, pair them with an effective composting program in order to realize the maximum human and environmental benefits associated with these products. Certified compostable containers biodegrade completely within approximately six months when properly composted (ASTM).

COMPOST

Food and other organic materials can be diverted from the waste stream by establishing a composting program that provides organic materials for landscaping operations or local farms. Composting can be conducted onsite or offsite and/or contracted to a service provider. Weigh the costs and feasibility of these options based on factors such as volume and types of waste generated, onsite land availability, availability of labor, and local demand for compost. Limit the labor associated with waste sorting by providing clearly marked compost bins and ask food service staff to develop a waste separation system.

ONSITE COMPOSTING **OPERATIONS** Onsite composting operations require upfront capital but will provide cost savings over time. Onsite composting can involve either traditional outdoor systems or indoor composter units. Use waste audit measurements (See the Food Services Guide for more details) to project the amount of organic material that will be available for composting. Research any permit requirements before establishing an onsite composting program. The following case studies exemplify successful onsite composting operations.

<u>Connecticut Department of Corrections</u> <u>University of New Hampshire</u> <u>Brown Creek Correctional Institute, Polkton,</u> <u>NC</u>

OFFSITE COMPOSTING. Contact your local or state solid waste agency for a list of composters in your area. Local composters may include farmers or privately owned composting facilities. Identify which organic wastes the composter will accept, your expected waste volume, and associated fees. There may be multiple facilities in your area willing to set up composting programs. Try to develop a composting collection schedule with other nearby facilities to reduce hauling fees. The following case study exemplifies a successful offsite composting operation. <u>Orange County, North Carolina</u>

Cost

unit basis. traditional Though, on a per food serviceware may seem inexpensive, it is an ongoing expense that can add up. Prior to July 2009, facilities operated by or contracted by Los Angeles County purchased over half a million dollars worth of EPS products on average every year. Other cost saving opportunities associated with food serviceware include: water and energy efficiencies in dishwashing, recycling revenues, and composting waste. Cost savings vary, but pilot programs can help provide realistic projections of potential savings.

REUSABLE FOOD CONTAINERS

durable rather Using than disposable serviceware reduces disposal costs. Bowling Green State University in Ohio switched from disposable to durable glasses, diverting 26,450 pounds of waste from the landfill and saving \$32,000 in waste fees in one year (WDCE 2006). Use the Serviceware Calculator to estimate cost savings from switching to reusable cups and bowls. According to a 2006 article from Healthcare Design Magazine, "Mercy Hospital, a 240-bed facility in Janesville, Wisconsin, set about revamping its food delivery system with a goal of improved feedback from patients. By switching to reusable dishware and flatware and going to a 'room service plan' in which patients order what they want, when they want it, Mercy was able to eliminate duplicate trays and unwanted food and facilitate a transition to reusable dinnerware. Add to that a recycling program, in which recyclables stay on the food tray and are then segregated back in the food service area, and you've got one successful program, a win-win situation" (Brown).

ALTERNATIVE SINGLE USE DISPOSABLE CONTAINERS

Based on research conducted by RPN for the County of Los Angeles, alternatives such as compostable items made from sugarcane, potato starch, paper, and corn-based plastic may sometimes be purchased at competitive prices, but are typically 2-4 times more expensive per unit compared to EPS products. The best way to offset these costs is to improve efficiency and reduce waste overall. This often includes improving recycling programs and integrating a composting system to ensure proper disposal of these products. In one pilot project that served over 33,000 patrons at a federal cafeteria, the agency saved \$880 on landscaping expenses by composting food waste and compostable serviceware and applying the resulting compost to their grounds (USDA). Other institutions realize revenues by selling their compost locally. See the <u>Responsible Purchasing Guide for Food</u> <u>Services</u> for details on how composting can save money.

QUALITY

There are many food container products on the market, including ceramic, glass, plastic, and many new alternative one-time-use disposable products. Most reusables are designed to last for 1000-3000 uses. According to research conducted for Starbucks in 2001, environmental benefits begin to accrue after just 36 uses for glass items and 75 uses for ceramics. Due to their durability, reusables prove the best option for dine-in services where storage and dishwashing capacity are available (AEI). Though consumer complaints slowed early adoption of compostable and recyclable products, there are many products that meet the performance needs of food service facilities. Here are some basic quality requirements:

- Freezer and microwave proof
- Maximum use temperature of 420°F
- Water and oil resistant
- Compostable within 180 days or less

To ensure products meet basic performance criteria, like those above for temperature, wetness, and cooking applications, ask for samples from vendors and have them tested at the facilities that will use them. See Standards and Specifications sections below for more details on quality requirements.

SUPPLY

There are dozens of vendors of food container alternatives. Bagasse, paper, and polylactic acid (PLA) products are now available through most mainstream dining services contractors (including those in the Compass family of companies) and food packaging suppliers. Institutions can also purchase these products directly through smaller regional manufacturers and distributors. Ask current dining service contractors and food container products vendors about certified bv Biodegradable Products Institute (BPI), Green Seal, and EcoLogo.

For more model and sample policies related to food services, please see the <u>Responsible Purchasing</u> <u>Guide for Food Services</u>.

<u>Healthcare Without Harm, Sample Policy for</u> <u>Purchasing Reusable Products, 2008</u>

Provides guidelines for purchasing activities to minimize the purchase of single-use, disposable products in order to reduce waste in hospitals when it does not compromise patient safety or care.

Rockland County, New York, Government Polystyrene Foam Elimination Act, 2008 The County recognizes the threat that nonbiodegradable food packaging can have on wildlife and the environment. In an effort to reduce the amount of waste in landfills serving the county, the government is taking steps to reduce the quantity of non-biodegradable food packaging products. This local law bans the use of polystyrene foam products by food vendors operating in Rockland County government departments and agencies.

<u>City and County of San Francisco, Food</u> <u>Services Waste Reduction Ordinance, 2006</u>

Sections 1601 through 1611 prohibit the use of polystyrene foam disposable food serviceware and require the use of biodegradable/compostable or recyclable disposable food serviceware by restaurants, retail food vendors, City departments and City contractors.

<u>California, Public Resources Code, Division 30,</u> <u>Chapter 5.42359.6(a), no date</u>

Directs companies to label food containers appropriately so the terms "compostable," "biodegradable," "degradable," do not imply that the container will break down in landfill, composting, marine, or other natural terrestrial environments, unless, at the time of the sale, the plastic food or beverage container meets the ASTM standards for the term used on the label. Other municipalities with some manner of EPS food container ban include, but are not limited to:

Albany, CA Alisa Viejo, CA Berkeley, CA Calabasas, CA Capitola, CA Emeryville, CA Huntington Beach, CA Los Angeles City, CA Malibu, CA Millbrae, CA Monterey, CA New Port Beach, CA Oakland, CA Orange County, CA Pacific Grove, CA Palo Alto, CA Portland, OR Rancho Cucamonga, CA San Mateo County, CA Santa Cruz, CA Santa Cruz County, CA Santa Monica, CA Santa Monica, CA Santa Monica, CA Seattle, WA Sonoma County, CA Ventura County, CA Watsonville, CA

These jurisdictions have proposed or have pending bans on polystyrene containers:

Issaquah, WA Maui County, HI San Juan Island, WA State of California State of Hawai'i State of New York

🔈 Specifications

Use these specifications, based on RPN research and other sample contracts listed below, to bid for compostable or recyclable serviceware.

PRODUCT REQUIREMENTS

- Products must be compostable or recyclable based on the capacity and services of facilities located within California.
- Coated paper products must be compostable based on the capacity and services of facilities located within California.
- Compostable products shall meet ASTM standards D6400 or D6868 as applicable, or be Biodegradable Products Institute (BPI) certified as verified by the bidder.
- Products shall be easily distinguishable at a reasonable distance from conventional EPS products by using identifiers such as a large label on one side of a cup or by color, tint or stripe.
- For compostable recyclable and products, bidder shall provide verification that products can be recycled or composted under current waste management systems, and provide information on at least two regional facilities or services where products may be recycled or composted.
- Products must contain recycled content.
- Products intended for "hot use" must not melt, deform or break apart when used as intended. Bidder must provide

exact temperature tolerances and userestrictions for these products.

- Paper product offerings shall be unbleached and processed chlorinefree.
- If unable to bid on exact size, bidder may state nearest comparable size.

PRODUCT PACKAGING REQUIREMENTS

- All packaging materials shall be made from at least 10% post consumer recycled content and be completely recyclable under current waste management systems.
- All paper-based packaging shall contain a minimum 30% postconsumer waste.
- Offerings should not be packed in foil, boPET film (e.g. Mylar), or excessive packaging.

PREFERENCE IS GIVEN TO PRODUCTS:

- Certified by EcoLogo or Green Seal. (See Standards section for details.)
- That can be composted in natural, marine, and/or backyard composting environments, as verified by the bidder.
- Manufactured with the highest amount of verifiable post-consumer waste content.
- Manufactured with content that is certifiably sourced from sustainably managed forests.
- Manufactured with a non-GMO feedstock.

- That provide for the application of custom labels and/or color identification, without an increase in price.
- With established track records of successful performance.
- With higher performance standards for their intended use, such as weightholding capacity, security of closure devices, leak resistance, shelf life and other quality factors deemed pertinent.
- Shipped with the least packaging.
- Manufactured with the closest proximity to LA County.
- That can be recycled or composted at facilities with the closest proximity to LA County.

SAMPLE SPECIFICATIONS

CityandCountyofSanFrancisco,CONTRACT88402:DisposableFoodContainers,Utensils& Serviceitems–Standard and Compostable,2007-2010

Standard food service items are limited to those made from paper, wood, and natural materials. Preference is given to clearly labeled, BPI-certified compostable paper products and those not lined with petroleum based materials.

California, Contract Number 1-09-73-02C, Disposable Food Service Supplies (Cups, Lids, Containers and Napkins), 2009-2010

Products must be compostable and biodegradable as defined by ASTM Standards. Sets recycled content minimums for containers, lids, sleeves, and napkins. Requires that all packaging materials contain at least 10% post consumer recycled content, and that all paper-based packaging must contain at least 30% post consumer recycled content.

Environmental standards and certifications such as the following make it easy for institutions to choose high quality and environmentally preferable disposable serviceware.

Green Seal

GS-35: STANDARD FOR FOOD SERVICE PACKAGING

Founded in 1989, Green Seal is a non-profit environmental standards-setting and certification agency based in Washington D.C. Standards are developed through an open stakeholder process. Evaluation of products and practices is done by Green Seal technical staff and external auditors and includes a comprehensive review of the product/practice components, supporting data, product/practice performance, and an on-site audit to ensure that all criteria are met. Certification requires annual monitoring to ensure continued compliance.

The GS-35 Standard establishes environmental criteria for disposable packaging and carry-out containers, including containers, plates and bowls from restaurants and other retail food service establishments. All products must have a minimum recycled content of 45% by weight and must be manufactured without use of chlorine bleaching and other toxics in packaging and inks.

EcoLogo

CCD-145: Food Containers

EcoLogo[™] is a Type I ecolabeling program (as defined in ISO 14024), and is managed by TerraChoice Environmental Marketing Inc. EcoLogo certifies resources used in food

service operations through the use of full life Certification cvcle assessments. criteria documents are developed through a process conforming to ISO 14024ecolabeling standards. The open, public and transparent process ensures the participation of a broad base of stakeholders including user groups, producers and associations. product scientists, consumer government agencies, representatives, academics and environmental advocates. Stakeholder input guides much of the establishment of criteria. The process includes performing an environmental lifecycle evaluation, determining the range of current industry performance, and establishing leadership criteria that represent approximately the top 20% of the industry.

This is a multi-attribute environmental standard for food containers that are made from agricultural waste products. The standard covers performance, safety, hazardous substances, and biodegradability.

BIODEGRADABLE PRODUCTS INSTITUTE (BPI) AND ASTM INTERNATIONAL

<u>ASTM D6400 - 04 Standard Specification for</u> <u>Compostable Plastics</u>

ASTM D6868 – 03 Standard Specification for Biodegradable Plastics Used as Coatings on Paper and Other Compostable Substrates

BPI is a multi-stakeholder non-profit working group that seeks to reduce the use of petroleum-based plastic by promoting

BPI certifies biodegradable materials. products against the ASTM standard for compostable plastics and coatings. ASTM International is a voluntary standards development organization that sets requirements for materials, products, systems, and services all around the world. The ASTM standard on compostable products covers plastics that are designed to be composted in municipal and industrial aerobic composting facilities. Plastics must contain properties that will allow 100% compostability at a rate comparable to known compostable materials.

Products

Use the RPN online Food Services product database to find serviceware (cups, plates, knives, forks, spoons, trays, containers and napkins) certified by Biodegradable Products Institute (BPI), Green Seal, and EcoLogo.

Calculators 🖓

Use the Serviceware (Wasteless) and Composting (Economic Analysis for Food Waste Composting or Reuse) calculators in the <u>Food Services Guide</u> to quantify costs, savings, and impacts related to food containers.

🔁 Addendum

Use the survey questionnaire below to gather information about the use, expenditures, and impacts of EPS food container use. This is a modified version of a questionnaire that RPN developed for the County of Los Angeles.

Expanded Polystyrene Food Container Products Survey

Our organization is conducting a survey of our use and expenditures on EPS, commonly known as StyrofoamTM, food containers. This information will help us to more fully understand current EPS usage across departments, and assess the feasibility of replacing food containers, such as cups, plates, and trays, made from EPS with other more environmentally preferred alternatives.

Please complete this questionnaire on behalf of your entire department and attach additional sheets if necessary.

Department/Location:	
Contact Person:	
Phone: (Business):	(Cell):
Fax:	
Email:	
Address:	

 Please list all of the operations, facilities, or locations under your purview that use disposable food containers, along with their addresses, for example: Hall of Administration, 500 West Temple Street, Los Angeles, CA 90012 XYZ Clinic, 123 N. Walnut St, Hawthorne, CA 90250

2. Which, if any, of the above (excluding contractors) directly purchases any EPS food container products? Please describe how these products are purchased (e.g. against a contract, from Office Depot, from a local vendor, etc) and complete the table under question #6 below.

3. Does your department have any contracts or agreements <u>requiring</u> the purchase of EPS food container products? ---- Y/N. If "Yes," when do those contracts end, and do they allow for any revisions prior to expiration?

4. Does your department work with contractors (e.g. cafeterias, concessions, events management, or catering services) who purchase any EPS food container products? ---- Y/N. If "Yes," please list those contractors and their contact information here and ask them to complete the table in question #6.

5. Please list the contact information for all EPS food container product suppliers (e.g., manufacturers, distributors, dining service providers) that work with your department or its contractors. If none, please enter "none."

Supplier Name Contact Person E-mail Phone

6. Please list all of the types (with size and description), functions, quantities, and costs associated with EPS food container products purchased or used in your department. If listing the number of cases, please include units per case.

EPS Food Container	Where Is It Being Used?	For What Purpose?	What is being served? (e.g.,	Quantity (units/period)	Cost (\$/unit or
Туре	(e.g., cafeteria, patient rooms, etc)	(e.g., serving inmates, office parties)	hot foods, greasy foods, etc)	(e.g., 40,000 cups /yr or 740 cases/month)	total cost in dollars per year)
e.g., 8oz white cups					

7. Does your department currently use food container products that are not made from EPS?----Y/N. If "Yes," please describe these in terms of type, function, quantity and cost.

8. Does your department have any special considerations related to health, safety, security, or other factors, when selecting food container products?----Y/N. If "Yes," please describe.

9. In the event EPS food container products are banned, do you foresee any significant issues in transitioning to alternative food container products? Please describe in detail. Examples might include: lack of dishwashing capacity, currently recycling only #1 and #2 plastics, limited composting capacity.

10. Which alternative food container products might be feasible for use at your department? (check all that apply) If there are any that are not feasible, please explain.

Reusable Biodegradable/Compostable Recyclable Others:

11. Comments:

🔈 Endnotes

AEI – Alliance for Environmental Innovation: A Project of the Environmental Defense Fund and Pew Charitable Trust. "Report of the Starbucks Coffee Company/Alliance for Environmental Innovation Joint Task Force." April 15, 2000. Available at

www.edf.org/documents/523_starbucks.pdf.

- ATSDR Department of Health and Human Services, Agency for Toxic Substances and Disease Registry. "ToxFAQs for Polybrominated Diphenyl Ethers (PBDEs)." September 2004. Available at <u>http://www.atsdr.cdc.gov/tfacts68-pbde.html</u>.
- AMRF Algalita Marine Research Foundation. "Pelagic Plastic." April 9, 2007. Available at <u>http://www.algalita.org/pdf/AMRFWhitePaper.pdf</u>.
- Aramark Aramark Higher Education. "A Business and Cultural Acceptance Case for Trayless Dining" July 2008.
- CIWMB California Integrated Waste Management Board. Use and Disposal of Polystyrene in California: A Report to the California State Legislature. December 2004. Available at www.ciwmb.ca.gov/Publications/Plastics/43204003.doc.
- CWA Clean Water Action. "Support the Ban on Foam Take-Out Containers." 2009. Available at <u>http://www.cleanwateraction.org/currents/california/summer2009/support-ban-foam-take-out-containers</u>.
- EPA United States Environmental Protection Agency, Office of Water. Plastic Pellets in the Aquatic Environment: Sources and Recommendations. December 1992. Available at http://dinrac.nowpap.org/documents/13%20EPA%20Plastic%20Pellets.pdf.
- 2000. United States Environmental Protection Agency, Technology Transfer Network, Air Toxics Web Site. "Styrene." January 2000. Available at <u>http://www.epa.gov/ttn/atw/hlthef/styrene.html</u>.
- Gordon, Miriam for the California Coastal Commission and Algalita Marine Research Foundation. "Eliminating Land-based Discharges of Marine Debris in California: A Plan of Action from The Plastic Debris Project." June 2006. Available at <u>http://www.plasticdebris.org/CA Action Plan 2006.pdf</u>.
- Brown, Janet. Healthcare Design Magazine. "Reduce, Reuse, Recycle—and Save." June 2006. Accessed on May 25, 2009. Available at <u>http://www.healthcaredesignmagazine.com/ME2/dirmod.asp?sid=9B6FFC446FF7486981EA3</u> <u>C0C3CCE4943&nm=Articles&type=Publishing&mod=Publications%3A%3AArticle&mid=8</u> <u>F3A7027421841978F18BE895F87F791&tier=4&id=4D1B83737D6049A5A9573AC92CB580E</u> <u>0</u>.
- NOAA NOAA Marine Debris Program. "De-mystifying the 'Great Pacific Garbage Patch' or 'Trash Vortex': Frequently Asked Questions." Accessed on June 24, 2009. Available at http://marinedebris.noaa.gov/info/patch.html.
- NTP National Institutes of Health, National Institute of Health Sciences, National Toxicology Program. "Since You Asked - Bisphenol A: Questions and Answers about the National Toxicology Program's Evaluation of Bisphenol A." Accessed on June 24, 2009. Available at <u>http://www.niehs.nih.gov/news/media/questions/sya-bpa.cfm</u>.

22 RESPONSIBLE PURCHASING GUIDE

- Santa Monica Santa Monica Office of Sustainability and the Environment. "Container Ban FAQs." Accessed on June 23, 2009. Available at <u>http://www.smgov.net/Departments/OSE/categories/content.aspx?id=4822</u>.
- US Census United States Census Bureau. "Polystyrene Foam Product Manufacturing: 2002." December 2004. Available at http://www.census.gov/prod/ec02/ec0231i326140.pdf.
- USDA United States Department of Agriculture, Cooperative State Research, Education, and Exstension Service. "Food and Biobased Cafeteriaware Composting for Federal Facilities in WDC." December 8, 2005. Available at http://www.csrees.usda.gov/nea/plants/pdfs/cafeteriaware.pdf.
- WDCE- White Dog Community Enterprises. "Cut it Out: Cost cutting measures that provide more dollars for better food." 2006 Available at http://www.whitedogcafefoundation.org/FTI/cost cutting.php.