

Compostable Foodservice Ware Program

Introduction

Many event venues, office buildings, malls, airports and other facilities with food court operations are embarking on the zero waste journey. One of the first steps in the journey is back-of-the-house organics collection for composting as there are no or minimal purchasing changes necessary.

Front-of-the-house collection of food waste and packaging is the next stage in zero waste practices and may involve significant modification to current foodservice packaging used by operators. With recent product innovations, there are many options available to food service operators.

As a Zero Waste Zones – Atlanta Participant, Hartsfield-Jackson Atlanta International Airport (HJAIA) works closely with the Sustainable Food Court Initiative (SFCI), an Elemental Impact Task Force in partnership with the National Restaurant Association, to bring zero waste practices to the airport operations. The new concessionaire contracts going into effect beginning in 2012 include, among others, the following provision:

“Concessionaire shall use compostable serviceware along with consumer facing packaging and source separate all food service wastes for direct transport to off-airport composting facilities.”

This document’s intent is to provide clear, concise information:

- 1) To allow concessionaires to satisfy the contract provisions stipulated in the Request for Proposal; and***
- 2) To ensure effective ongoing communication with product manufacturers and distributors.***

The SFCI Team is available to support concessionaires with education and information on compostable packaging. With a solid understanding of the compostable packaging requirements, operators are in a position to work with existing distributors or discover additional options in the marketplace to satisfy the Compostable Foodservice Ware Program evolution of their foodservice packaging.

For more details, please refer to the information provided below:

- **Composting: what is it, why do it, and why it is important at the Atlanta Airport**
- **The importance of packaging in successful composting**
- **Compostable foodservice ware contract requirements**
- **Types of compostable foodservice ware products covered by contract restrictions**
- **Description of compostable foodservice product types**
- **Resources for more information**
- **Frequently Asked Questions**

Compostable Foodservice Ware Program

Fact Sheet

Composting: What Is It and Why Do It

Composting is the natural breakdown of organic materials into high quality soil amendments in a controlled environment. Composting has numerous benefits. When added to soil, compost increases the nutrient content in soils, helps soils retain moisture, reduces need for chemical fertilizers, suppresses plant diseases and pests, promotes higher yields of agricultural crops, regenerates poor soils, and manages soil erosion problems and storm water.

Why Composting at the Atlanta Airport Is Important

Hartsfield-Jackson Atlanta International Airport (HJAIA) sends more than 19,000 tons of waste to Georgia landfills each year. Food scraps are the single largest component of HJAIA waste, making up about one-third of this tonnage.¹ In fact, food waste is the most prevalent material disposed in the landfills in the State of Georgia.² Non-recyclable paper and plastic foodservice ware represent significant volumes of HJAIA's trash as well. HJAIA has a goal to divert 50% of its waste from landfill disposal by 2015. Composting food waste is essential to reach this goal, and switching to compostable food packaging will enable successful food residuals recovery. Diverting these materials from landfill disposal to a local composting facility has many benefits:

- When landfilled, food scraps and other putrescible materials are a liability as they break down and produce methane, a greenhouse gas 25 times more potent than carbon dioxide in its global warming strength.³ When composted, however, biodegradable materials become a valuable asset. Compost is a marketable soil amendment product.
- Composting all of HJAIA's food waste would reduce greenhouse gases the equivalent to avoiding consumption of an estimated half a million gallons of gasoline per year.⁴
- On a per-ton basis, composting sustains 4 times more jobs than landfill disposal and creates a marketable commercial soil amendment product.⁵
- Composting operations have an unlimited lifetime whereas landfills fill up and eventually close.

The Importance of Packaging in Successful Composting

Use of compostable foodservice packaging helps increase the amount of food residuals that can be diverted from landfill disposal. It also minimizes source separation of materials (food vs. non-food) and helps to reduce contamination of the compostable material collected. In recent years, compostable food packaging has experienced innovation, progress, and growing market share. Almost every disposable product has a compostable alternative that works as well as traditional products. There is now a wide variety of compostable foodservice products available: cups, plates, bowls, clamshells, cutlery, straws, gloves, trays, bags, boxes, coffee sleeves and sheets, hot and cold lids for paper and clear plastic cups, and various formats of foodservice ware including flexible and rigid packaging. There are many different brands to choose from for products in every category. Use of compostable products by food vendors can reduce overall trash removal needs and costs, enable more food residuals recovery, and help avoid contamination of compostable materials collected. Using compostable packaging products allows the public an easy one-step recovery of food residuals and service ware into compost rather than garbage.

All HJAIA Food Vendors Shall Use Compostable Foodservice Ware

Beginning in 2012, food vendors will be required to use compostable service ware to support HJAIA's goal to divert 50% of its waste from landfill by 2015. HJAIA defines 'compostable products' as those that are approved as being compostable by the following third parties:

- 1) The Biodegradable Products Institute (BPI); or**
- 2) Cedar Grove Composting.**

In order to be considered suitable for use on a concourse foodservice operation, foodservice ware used must have a valid BPI certification of compostability or be listed on Cedar Grove's accepted product list. Third-party approval means that an independent third party has confirmed that the product(s) being used meet the compostable guidelines set by established industry standards. Third-party approval is important because many products carry deceptive or false claims about biodegradability or compostability.

In North America, BPI is the third-party agency that determines if products are commercially compostable according to industry standards developed by the American Society of Testing & Materials (ASTM).⁶ BPI-certified products often display the certification logo on the actual product and packaging materials. For a listing of BPI-certified compostable products, visit the Biodegradable Products Institute web site at: [BPI Approved Food Service Suppliers](http://www.bpi.com/ApprovedFoodServiceSuppliers).



BPI logo

Cedar Grove Composting offers a program of technical review and field testing for compostable products to determine their feasibility in its state-of-the-art commercial composting process. For a listing of Cedar Grove-accepted products, visit: <http://www.cedar-grove.com/acceptable/Accepted%20List.asp>.

Types of Compostable Foodservice Ware Products Covered by Contract Restrictions

The following types of foodservice ware used by food vendors should be BPI-certified or Cedar Grove accepted:

- Cutlery (e.g., forks, spoons, and knives, including both individually wrapped and bulk utensils);
- Plates, bowls and cups (for both hot and cold applications);
- Take-out packaging (such as clamshells, boxes, deli containers, deli/bakery bags, or containers with separate lids); and
- Ancillary items such as lids, straws, trays, and coffee stirrers.
- Paper napkins are widely accepted as compostable and do not need to be third-party approved.

Description of Compostable Foodservice Product Types

Compostable products are capable of undergoing biological decomposition at a commercial compost site. Within 85 days (time depends on the product and the composting system), the product is not visually distinguishable. Within 180 days, it will break down to carbon dioxide, water, inorganic compounds, and biomass at a rate consistent with those of known compostable materials (e.g., leaves).

Many compostable products are made of plant-based materials derived from renewable agricultural and forestry resources such as corn, soybean, bamboo, sugarcane, grass, and cellulose. But there are also fully compostable resins that are fossil-fuel-based (made from non-renewable petroleum or natural gas).

Compostable foodservice ware generally fall into two main types:

1. **Paper and Other Plant-Fiber-Based Items:** These natural fiber or cellulose-based items look and feel biodegradable and thus compostable. They include products made from paper (e.g., bowls, boxes, cups, plates, napkins, paper straws and bags), sugarcane/bagasse, wheat, and rice (e.g., hinged containers, trays and cup holders), and wood (e.g., stirrers). Natural fiber products can be coated or uncoated. NOTE: Polyethylene-plastic-coated products are not compostable.
2. **Plastic Items:** Compostable plastic can range in color from green and brown to off-white and clear. It can look and feel like conventional non-compostable plastic, virtually indistinguishable from standard PETE, HDPE, PP, or PS type items when in use. They include products made from corn-based polylactic acid or PLA (e.g., cold cups, hinged and lidded containers and cutlery) and fossil-fuel-based resins (e.g., plastic bags).

Resources

Elemental Impact

<http://www.elementalimpact.org>

Elemental Impact is a national nonprofit organization dedicated to bringing sustainable operating practices to the corporate community. Many of its programs are in partnership with the National Restaurant Association and focus on supporting the foodservice industry.

Biodegradable Products Institute

<http://www.bpiworld.org/>

The Biodegradable Products Institute (BPI) – a trade association for the compostable products industry – third-party certifies the compostability of a wide range of foodservice and other items and offers a compostable label program for these products. Its directory of third-party certified compostable products is available at <http://www.bpiworld.org/BPI-Public/Approved/1.html>.

Foodservice Packaging Institute

<http://www.fpi.org/>

The Foodservice Packaging Institute (FPI) is the trade association for the single-use foodservice packaging industry in North America. Members include converters and their raw material and machinery suppliers, along with foodservice distributors and operators.

GreenBlue's Sustainable Packaging Coalition

<http://www.greenblue.org/>

<http://www.sustainablepackaging.org/>

GreenBlue® is a nonprofit that equips business with the science and resources to make products more sustainable. Through its work leading the Sustainable Packaging Coalition®, GreenBlue brings together companies from across the packaging supply chain to collectively develop resources and implement packaging solutions.

Green Purchasing Institute/Responsible Purchasing Network

<http://www.responsiblepurchasing.org/>

The Responsible Purchasing Network (RPN) is an international network of buyers dedicated to socially responsible and environmentally sustainable purchasing. It provides institutional purchasers with procurement tools and resources designed to save money, conserve resources, reduce waste, and improve efficiency. Its responsible purchasing guide for food services is available at http://www.responsiblepurchasing.org/purchasing_guides/food_services/index.php.

Institute for Local Self-Reliance, Sustainable Plastics Initiative

www.sustainableplastics.org

ILSR's Sustainable Plastics Initiative explores how plastics can be more sustainable throughout their lifecycle from production to recycling or composting at the end of intended use. Information on early adopters using and composting biobased products is available at <http://sustainableplastics.org/early-adopters>.

National Restaurant Association – Conserve Sustainability Education ProgramSM

<http://conserve.restaurant.org/>

Conserve is an online resource developed by the restaurant industry for the restaurant industry. It helps restaurants reduce energy, waste, and water; drive down costs; and leave a lighter footprint by offering helpful tips, videos, and best practices.

Sustainable Biomaterials Collaborative

<http://www.sustainablebiomaterials.org/>

The Sustainable Biomaterials Collaborative (SBC) provides purchasing specifications for buyers of compostable food service ware. These specifications were designed to find products that are sustainable from cradle-to-cradle, including biomass production, manufacturing, and recovery. Sample purchasing specifications and bid evaluation sheets are available at: <http://www.sustainablebiomaterials.org/criteria.purchasing.php>.

US Composting Council

<http://compostingcouncil.org/>

The US Composting Council (USCC) is a national, nonprofit trade and professional association promoting recycling of organic materials through composting. It supports the Compostable Logo Program, a joint effort between the USCC and the Biodegradable Products Institute.

Endnotes

¹ CDM Composition Study, 2006.

² Georgia Department of Community Affairs, Georgia Statewide Waste Characterization Study, Final Report, by R.W. Beck, June 22, 2005, pp. 4-7, A-5

³ Intergovernmental Panel on Climate Change (IPCC), "Table 2.14," p. 212, Forster, P., et al, 2007: Changes in Atmospheric Constituents and in Radiative Forcing. In: Climate Change 2007: The Physical Science Basis.

⁴ Environmental Protection Agency, "Waste Reduction Model (WARM), Climate Change – Waste" web site, web-based calculator, based on approximately 5,500 tons of food scraps per year diverted from landfill disposal to composting. http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html.

⁵ Brenda Platt and Neil Seldman, Institute for Local Self-Reliance, *Wasting and Recycling in the United States 2000* (Washington, DC: 2000), p. 27.

⁶ Plastics and plastic-coated paper that meet ASTM D6400 and ASTM D6868, respectively, can be certified as compostable in commercial composting facilities.

Compostable Foodservice Ware Program

FAQs

Why require foodservice ware to be compostable?

Single-use foodservice ware products such as drink cups, take-out containers, and cutlery are thrown away as trash in large volumes at Hartsfield-Jackson Atlanta International Airport (HJAIA). They are not recyclable at HJAIA. Compostable alternatives are now easily sourced and are no longer considered specialty items. Requiring food vendors to use compostable products will reduce overall trash removal needs and costs, enable food residuals recovery, and help avoid contamination of collection bins for compostable materials.

Food residuals commingled with compostable packaging diverts one waste stream from landfills that was previously two waste streams. No cleaning or washing of compostable products is needed for recovery. Unlike traditional recycling of plastics and paper, compostable items do not have to be free of ice, liquids, grease, and other food residues in order to be composted. They can be put straight into the collection bin with any remaining food scraps; they will decompose together at the composting facility. Customer participation is an easy one-step process. Convenient access to properly labeled bins is a critical component to ensure high customer participation levels.

What is the difference between recyclable and compostable products?

“Recyclable Products” include the reuse, reconditioning, and remanufacturing of products or parts in another product. Similarly, “recycled content” includes products and packages that contain reused, reconditioned or remanufactured materials, as well as recycled raw material. “Compostable Products” will break down, or become part of usable compost (for example, soil-conditioning material or mulch), in a safe and timely manner in a commercial composting facility.¹ Composting turns biodegradable materials into usable compost, which is a humus-like material that enriches and returns nutrients to the soil.

Why is HJAIA requiring that food vendors use third-party-approved products?

Unfortunately, there are many available products with misleading, deceptive or unsubstantiated claims of biodegradability or compostability. Buyer beware! Items with simple claims of “biodegradability” or “biobased content” do not mean they are, in fact, compostable. Because the intent of HJAIA’s program is to minimize landfilling, products designed to be “biodegradable” in a landfill are not acceptable. Be sure the products you buy are certified as compostable by the Biodegradable Products Institute (BPI) or accepted as compostable by Cedar Grove Composting, which field-tests the compostability of food service items in its state-of-the-art composting facility.

BPI is a third-party certifier of commercially compostable resins, films, foodservice ware and other products. It is recognized by the US Composting Council (the trade association for the composting industry) as the leading industry organization for determining product compostability in North America. BPI-certified compostable products are being used successfully in numerous restaurants as part of diversion efforts throughout the US and Canada.

BPI-certified items have passed rigorous testing at reputable labs under one of two scientifically accepted standards: ASTM 6400 for plastics or ASTM 6868 for plastic-coated paper. To pass these standards, products have to meet thresholds for three basic elements: biodegradation, disintegration, and safety (measured by ability to grow plants and limits on certain regulated heavy metals such as lead). A product that only meets one or two of the elements but not all three will fail the standard.

For a complete list of BPI-certified products and brand names, go to:
[BPI Approved Food Service Suppliers.](#)

For a complete list of Cedar Grove Composting-accepted products, go to:
<http://www.cedar-grove.com/acceptable/Accepted%20List.asp>.

Third-party approval of specific products is important as suppliers may claim that their products meet ASTM when in reality they may only meet one part of the standard, or one material component of the product may meet the standard but not the whole product. Product suppliers may also claim that products meet ASTM requirements by citing ASTM 5963. This ASTM specification has no pass/fail criteria and is only a guideline of how to test. Moreover, claims of “biobased content” can also create confusion. Many biobased products are blends of some natural plant-based starch fillers with standard polypropylene plastics, which render them non-compostable and non-recyclable. Composters do not want such products; they represent contamination and result in higher costs for screening and managing as a waste.

HJAIA and its food vendors can only be certain that products are commercially compostable if the product itself has been approved by a third-party independent organization. Many third-party certified products also carry the third-party certifier’s compostable logo. Fortunately, foodservice operators can choose among a wide selection of BPI-certified and Cedar Grove-accepted products, price ranges and quality.

Why do coated paper products need to be third-party approved as compostable?

Many paper foodservice items such as cups are coated with plastic polyethylene, which are not compostable. In fact, new research shows that polyethylene-coated paper products are bad for composting operations and the quality of compost.² Compostable coated-paper products are widely available. These products tend to be coated with a corn-based plastic. Requiring BPI-certification or Cedar Grove acceptance ensures that any coated paper products are truly compostable. Paper napkins do not need to be BPI-certified or Cedar-Grove accepted as napkins are not coated and are widely accepted as compostable.

Where can compostable products be found?

Due to growing innovation and progress in the food packaging industry, information on compostable alternatives can now generally be found wherever you buy foodservice products. Ask your distributor for more information. There is a wide variety of compostable foodservice ware products available on the market: cups, plates, bowls, clamshells, cutlery, straws, trays, bags, boxes, coffee sleeves and sheets, hot and cold lids for paper and clear plastic cups, and various formats of foodservice ware including flexible and rigid packaging. There are many different brands to choose from for products in every category. Almost every disposable product has a compostable alternative that works as well as its traditional counterparts products. Test products to ensure they meet your performance needs.

For a listing of BPI-certified compostable products, visit the Biodegradable Products Institute website at:
[BPI Approved Food Service Suppliers.](#)

For a complete list of Cedar Grove Composting-accepted products, visit:
<http://www.cedar-grove.com/acceptable/Accepted%20List.asp>.

What types of foodservice ware must be compostable?

Food vendors must ensure that they offer the following types of third-party approved compostable foodservice ware:

- Cutlery (e.g., forks, spoons, and knives, including both, without limitation, individually wrapped and bulk utensils);
- Plates, bowls and cups (for both hot and cold applications);
- Take-out packaging (such as clamshells, boxes, deli containers, deli/bakery bags or containers with separate lids); and
- Ancillary items such as lids, straws, trays and coffee stirrers.

Paper napkins are widely accepted as compostable and do not need to be third-party approved.

Are any foodservice ware items exempt from the contract requirement?

Exemptions will be considered by HJAIA, in its sole discretion, on an individual case-by-case basis as requested.

How costly are compostable foodservice ware products?

Several factors affect the cost competitiveness of products such as distribution, quantity, and material. Many compostable products have become price competitive with their paper counterparts. When compared to polystyrene foam (commonly known as Styrofoam), few products are price competitive. However, the rising cost of oil has increased the price of petroleum-based products, making compostables – which have become more “mainstream” in the market – increasingly competitive with traditional plastic products. As more compostable products are used, economies of scale will likely cause the purchase price of these products to fall.

Are compostable foodservice ware products in use at other venues?

Compostable ware is used in a wide variety of foodservice operations from sit-down restaurants and university and hospital cafeterias to sports arenas and foodservice courts in airports. Safeco Field, the Mariner’s baseball stadium in Seattle, switched to compostable foodservice ware; this led to an overall \$70,000 reduction in waste disposal costs and a recycling/composting rate of 82 percent in 2010.³ The San Francisco International Airport (SFO) requires the use of compostable tableware by all of its Terminal 2 food vendors to reach recycling rates of 75% in 2010 and 90% by 2020.

Endnotes



¹ Federal Trade Commission, Bureau of Consumer Protection, “Complying with the Environmental Marketing Guides,” web site at: <http://business.ftc.gov/documents/bus42-complying-environmental-marketing-guides>, January 2, 2012.

² Will Brinton, Cyndra Dietz, Alycia Bouyounan, and Dan Matsch, “New Opportunities in Recycling and Product Manufacture Eliminate the Environmental Hazards Inherent in the Composting of Plastic-Coated Paper Products,” Woods End Laboratories (Mt. Vernon, ME) and Eco-Cycle, Inc. (Boulder, CO), April 2011.

³ Dan Sullivan, “Take Me Out to the Windrow,” *BioCycle*, December 2010, Vol. 51, No. 12, p. 22.