

Green Cafeterias

The Environmental Protection Agency (EPA) at Research Triangle Park (RTP) in North Carolina is a national leader in green building and engineering. Winner of the White House “Closing the Circle Award” and former Vice-President Al Gore’s “Hammer Award”, the [EPA facilities at RTP](#) continue to press on in expanding their green programs beyond building design and into the everyday work environment of RTP employees. As part of this expansion, EPA/ RTP facility launched a “green” cafeteria project in the fall of 2001, culminating in the creation of the “Lakeside Café”. EPA/ RTP, home to over 1,550 employees, integrated language for its cafeteria program that like the rest of the facility at RTP, serves as a model for all other programs wishing to incorporate green solutions for the new wave of green cafeterias.

Process

With the completion of the EPA campus at RTP, it was a goal of EPA/ RTP to create a cafeteria that focused on recycling, reuse and composting of cafeteria products and materials. The EPA’s commitment to sustainability and source reduction/pollution prevention strategies makes the RTP cafeteria a prime example of policy transforming into action. EPA strove to make the “Lakeside Café” an environmentally sound and practical facility that firmly adhered to “green” principles.

Environmentally Preferable Products and Services

At RTP, the statement of work for the cafeteria contractor ARAMARK targets Environmentally Preferable Purchasing (EPP), source reduction, and effective waste disposal.¹ The EPA’s EPP Final

EPA/RTP Cafeteria At a Glance

Environmental Attributes:

- Permanent china and stainless steel service-ware minimizes generation of waste
- Monetary discounts given to those who bring their own re-usable coffee mugs, further reducing the general waste stream
- Starch-based cafeteria ware possesses several environmental characteristics:
 - § made mostly from starch
 - § compostable
 - § biodegradable
 - § uses less energy to produce than paper or polystyrene containers
- 100% recycled unbleached napkins are compostable.
- recycling plastic and glass bottles and aluminum cans

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¹This language was set forth in the Statement of Work as follows:

"[Recycling](#)

Guidance lists [Five Guiding Principles](#) to direct purchasers towards environmentally friendly procurement decisions. In fulfilling their contractual obligations, ARAMARK purchased a variety of products that matched up with as many of the guiding principles as possible. To begin, ARAMARK placed multiple recycle and composting bins in all areas of the cafeteria to ensure customers discarded all recyclable and compostable objects in the appropriate receptacles. The placement of these containers fulfilled the contract requirements that stated all paper service products such as napkins, cups, plates, bowls, etc. be made with either 100% recycled materials or be used for compost. Every two days, RTP trucks compostable wastes to a composting facility sixty miles from EPA/RTP. The composter then offers a discount to EPA in the purchase of finished compost for use on the RTP site. This practice fulfills the contractual obligation that no organic wastes be sent to a landfill. Furthermore, this method helps "close the circle" by not only providing a raw product to make compost, but by purchasing the finished compost and using it wherever it's needed, such as beds and wildflower areas.

Recycled/Compostable Products

- § [EarthShell](#) biodegradable plates and bowls used for **take-out only**
- § BioCorps biodegradable disposable flatware also used for take-out.
- § 100% recycled unbleached napkins
- § 100% recycled wax paper cups for cold drinks
- § 100% recycled paper cups for hot drinks
- § 100% recycled paper containers
- § Wood stirrers for hot drinks

(All of the above 100% items are fully compostable and food service staff deposits these items left on trays into food waste containers to be sent for composting)

For items directed for reuse, ARAMARK selected products with long-lasting, environmentally preferable qualities.

Reusable Products

- § 2400 "contour cups" donated by Coca-Cola® Company, given out to EPA employees at cafeteria opening and placed for sale thereafter to reduce use of disposable cold-drink cups
- § Hot mugs donated by Starbucks® for hot drinks
- § \$.05-\$.15 discount for bringing personal mug or cup for beverages
- § Permanent china and stainless service-ware to minimize the generation of waste

Other Services

In addition to the products and services named above, the cafeteria contract provides for further source

All paper products provided by the contractor shall be from 100% recycled materials which can be composted. The contractor shall recycle all glass, aluminum, plastic and metal containers used in food preparation. In an effort to reduce paper waste, the contractor shall provide a monetary savings incentive for any employee who uses their personal coffee cup. Also, the contractor shall provide for purchase of reusable mugs for participation in the discount rate. This program shall be advertised via appropriate signage. The contractor shall provide a plan to the Project Officer for the recycling of food waste within fifteen (15) calendar days of the contract award, for approval by the Project Officer. This plan shall include the waste created during food preparation and collected from returned serving trays. The plan will be approved or disapproved by the Project Officer within seven (7) calendar days. If the plan is disapproved, the contractor shall submit a revised plan within ten (10) calendar days of disapproval notice."

reduction.

- § Food scraps from the kitchen and customer trays are composted
- § Aluminum cans and plastic and glass bottles are sorted for recycling at the customer tray drop area and in the kitchen

“Greening” Inside and Out

Greening the cafeteria was only part of the overall goal of the project. The EPA employees at RTP also set out to take the P2 principles out of the cafeteria and into their everyday work space. The EPA/RTP staff decided to practice true pollution prevention techniques by halting the main attraction for insects and other vermin, people-generated waste, rather than use traditional pesticides. Managers at RTP laid out “in-office” food-related policies that aimed to eliminate the cause of bugs and vermin; that is food left at the desks of employees. For example, managers limit coffee pots to shared service locations in office suites, thus minimizing food waste and residues that can attract insects.

Cost Considerations

While cost was an obvious consideration for the new cafeteria in the RTP facilities, both EPA and ARAMARK managers of the cafeteria insist that cafeteria and EPA employees’ exposure to the program far outweigh the costs incurred. For the current population of the EPA at RTP (1,550 employees, expected to grow to just over 2,000 at full-occupancy), the pick-up of compostable items costs approximately \$125 per week. EarthShell plates cost per unit about the same as a high-end Chinet™ plate (~\$.06-\$.07 per plate). However, the lids to the EarthShell plates are fairly expensive (\$.18 per lid) and furthermore the lids are not compostable. EarthShell does not currently provide a compostable lid for their plates and so lids can be considered an environmental loss. The total cost of a “to-go” container is \$.24, compared to approximately \$.06 for a hinged styrene (“clamshell”) container. However, the prices charged to the cafeteria for these products are still competitive and well within the terms of the contract.

Lessons learned

As mentioned above, the managers of the “Lakeside Café” believe that employee exposure to the café’s environmental program far outweighs the costs incurred. Because the term “cafeteria” often conjures up low budget, mystery meat visions, RTP held a cafeteria name competition because, according to one manager, “it’s a very nice, upscale food court with a dining room, real china, among other niceties.” Thus emerged the name “Lakeside Café”. A name that immediately drew positive attention from employees. The pleasant atmosphere coupled with firm “green” principles only enhance the aesthetic and practical appeal of the project to all involved. The managers also believe that as a result of this exposure to “green” practices within an upscale atmosphere, more food service establishments like ARAMARK will use these “green” products and services. The desired result: a decreasing of prices with the increasing of demand volume. Employee reaction and acceptance of the “green” program revealed to the managers of RTP that continued exposure to environmentally-preferable options increases the likelihood that employees will adopt these practices beyond the cafeteria and into their everyday lives.

Indeed, one of the ultimate goals of the EPA/RTP project is to bring these “green” practices out

of the workplace and into homes across America. One finds a primary examples of this goal in the composting arena of the project. While the composting program is still growing, EPA managers of the “Lakeside Café” project proclaim “the compost program is worthwhile if only because it makes an environmental stewardship statement every time people leave the dining room .” Mangers say people consciously leave compostables on their plates, and the mangers are willing to bet that more customers will begin to compost at home . Furthermore, one manager says “I see people all the time standing there and telling their guests about it [composting waste], stirring up more interest and emphasis on EPA's environmentally-sound approaches.”

Project Future

At present, those heading up the RTP cafeteria are happy with their accomplishments thus far and are looking forward to expanding the “greenness” of the “Lakeside Café”. Included on the “wish list” for the project is a local composting site (this has yet to materialize as the RTP staff await a contractor proposal to find or make an appropriate composting site). A local site will not only reduce transportation costs but will reduce the impacts from air pollution that trucks create from toting compostables 60 miles away. Yet a local compost site will not be needed if managers can maintain the driving emphasis on reusability over compostability and ensure that the china plates, silverware, and reusable cups receive first priority in usage over the biodegradable materials used in the café.

It is still too early to tell how successful the entire project will be. However, if the initial successes and the enthusiasm of the EPA employees at RTP are any indication, the project could have a long standing impact on the food service industry.

For more information on the EPA café at Research Triangle Park, contact Jeffery Simmons, Project Officer at RTP, at simmons.jeffery@epa.gov .