

# **NERC** | Northeast Recycling Council

139 Main Street, Suite 401 • Brattleboro, Vermont 05301-2800  
802.254.3636 • 802.254.5870 fax • [www.nerc.org](http://www.nerc.org) • [info@nerc.org](mailto:info@nerc.org)

## **Food Waste Composting at a Special Event: The Sodexo Company Rentschler Field Case Study 2009 - 2010**



**Written by Athena Lee Bradley, Northeast Recycling Council, Inc.**

This document was made possible by a grant from the US Environmental Protection Agency. For more information on recycling and composting at special events visit the [NERC Website](http://www.nerc.org) or call 802-254-3636.

## Overview

NERC was awarded an EPA New England Resource Conservation Challenge Grant to conduct food waste composting pilots at special events. NERC worked with special events of varying types and sizes to demonstrate different methodologies for designing and implementing food waste diversion programs. For purposes of the project, materials to be diverted include pre- and post-consumer food, as well as compostable flatware, plates, packaging, and napkins. Assistance with integrating food diversion into existing recycling efforts or implementation of recycling is also provided, along with presentation of zero waste as a viable option.

### Key Steps to Food Diversion at Stadium Events

- Commitment of management.
- Training and dedication of staff.
- Monitored food waste collection stations.
- Use of compostable service ware.

The goal of the project was to assist organizers to implement food waste diversion at their events and to develop a program that is sustainable, as well as to serve as a model for other events.



## The Event

Sodexo Food Diversion at a Glance	
<b>Location</b>	<a href="#">Rentscher Field</a> , East Hartford, Connecticut
<b>Organizer</b>	The Sodexo Company, a subsidiary of Sodexo, Inc.,
<b>Contact</b>	Joanne Gagnon <a href="mailto:Joanne.gagnon@sodexo.com">Joanne.gagnon@sodexo.com</a>
<b>Date</b>	Six Football games (September, 2009 – January, 2010); catering events throughout the year.
<b>Estimated participants in pilot</b>	Approximately 1,500 in the Concession, Catering, and Club sections, and 500 to 1,000 at Corporate Tents per game.
<b>Food waste &amp; biodegradable service ware composted:</b> Pre- and post consumer food wastes, compostable paper and plastic service ware, soiled paper	3.35 tons of food waste 1.5 tons of grease
<b>Materials recycled:</b> Cardboard, steel/tin cans, plastic bottles, aluminum cans, aluminum foil, scrap metal, light bulbs.	4.25 tons
<b>Solid waste generated</b>	36.65 tons
<b>Compost Processor</b>	New Milford Farms

Rentschler Field is Connecticut's sports and entertainment stadium owned by the State of Connecticut. In addition to being the home of the University of Connecticut Huskies (UConn) football team, Rentschler Field's 40,000-seat stadium serves as a venue for concerts, conferences, banquets, and special events.

The Sodexo Company is the concessionaire and caterer selected to direct and manage all concession and food service operations at Rentschler Field for both event-day requirements and private parties and meetings. Sodexo provides customized services, including basic concessions and gourmet catering. Sodexo, Inc. is a leading provider of integrated food and facilities management services in the U.S., Canada, and Mexico, serving 10 million customers in 6,000 locations every day.



The facility provides a venue for corporate and government meetings, banquets, weddings and other celebrations, trade shows, and other events. The facility features more than 7,500 square feet of meeting/reception space, on-site catering, two full service bars, and one full service concessions stand. Sodexo manages and provides staffing for all Rentschler Field concession areas. These include the club level which has two full service bars, full service concession stand, and a preparation area for up to 800 people.



The outside perimeter concourse level of Rentschler Field has 16 concession stands located around it. Sixteen of those concession stands have complete food preparation; an additional two locations are only equipped for vending. The southeast side of the stadium lower level provides the appropriate supporting kitchen/preparation space, office space, and employee space. There are novelty/merchandise stands located on the outside perimeter concourse level of the north and south sides of the stadium.

After each football event, Sodexo works with non-profit groups to come in and help clean the stadium property. All groups must have a minimum of 30 people and no more than 35. All participants must be at least 16 years old. These groups earn \$10 an hour towards their cause and keep the deposit revenue received from the redeemable beverage containers collected. "Bottle pickers" are allowed into the Tailgating areas the morning following the game to collect redeemable containers as well.

## Food Waste Diversion Planning

### Background

Sodexo was initially contacted by the Connecticut Department of Environmental Protection (CT DEP) about participating in NERC's Food Waste Diversion project. Sodexo had already been considering food waste diversion and recycling for their catering events at Rentschler Field and so embraced the proposal. In June 2009, a meeting was held to discuss the general overview of the Sodexo operation at Rentschler Field, the plans made to date by Sodexo to implement recycling and composting at the Stadium, and the roles that NERC and CT DEP could play in working with Sodexo to implement diversion at the UConn Football Games and its catering events.



An initial waste assessment by NERC and CT DEP and implementation of a pilot composting event was scheduled for the first game of the season on September 12, 2009.

Areas included were the Club area, Skyboxes, Corporate Tents, Kitchen and Pantries, Food Vendor Concourse, and Beer Stations. The Tailgating area was also observed, but this area is so huge that it was decided to concentrate on the Stadium complex. The assessment consisted of a walk-through of each area, discussions with the Sodexo manager, waste surveys of each of the food concession areas, and observation of all tent areas. The waste survey consists of visual observation and recording the types of food served, packaging used, and wastes generated. Findings of the waste assessment and observations were included in a Food Waste Management Plan to be developed by NERC and provided to Sodexo for its implementation.

### **Planning and Logistics**

There are six football games per year. Sodexo has full control of food preparation in the facility. Recycling and composting were implemented in the following stadium areas for the 2009 football season:

- ▶ Club Area: Approximately 675 people can be seated in the Club areas.
- ▶ Luxury Suites (Skyboxes): There are 38 Luxury Suites, each holding up to 20 people per suite.
- ▶ Corporate Tents: Each game has 2-10 large tents sponsored by corporations or Alumni. Tents are open approximately 2 hours before the game and close when the game starts.
- ▶ Press and Media Boxes.

### **Pilot Food Waste Diversion Project Implementation**

The pilot food waste diversion project was implemented at the UConn game held on September 12, 2009. Pre-consumer and post-consumer food wastes, soiled paper, and compostable plastic service ware were collected at all Corporate Tents, Club areas, Luxury Suites, press areas, and kitchen and pantries for the pilot event.

NERC and CT DEP staff provided assistance with implementing the pilot compost and recycling collection for the game; including troubleshooting, working with employees to train and assist as necessary, as well as monitoring for efficiencies and ease of operations.



Following this first pilot event, Sodexo continued with composting and recycling at six UConn football games and providing composting services at several hundred catered special events during the year.

## **Employee Training**

There are 400 Sodexo employees. A mandatory training is held each August for all Sodexo stadium employees. NERC developed a PowerPoint presentation and written handout for Sodexo to use to train its employees for the recycling and compost collection. The presentation and written information was incorporated into the employee orientation.

## **Containers and Supplies**

Sodexo was provided with 65-gallon carts on wheels from the hauler for the collection of food wastes and soiled paper. Recycling collection carts were also provided.

## **Location of Compost Collection Containers during Pilot Collection**

### Kitchen Area

- Collection carts were located next to the recycling carts for convenient use by kitchen staff.

### Club Area, Luxury Suites, Press Boxes

- Collection carts were placed in the pantry areas and other out-of-the-way locations for easy access by Sodexo employees.
- Concern over unsightliness and space limitations inside the participant gathering areas limited container placement, however Sodexo employees typically bus these areas so bin placement was satisfactory for this purpose.



### Corporate Tents

- Carts were placed outside of each tent.

## **Compost Collection Logistics**

### Kitchen Area

- Virtually all food for the Club Area, Luxury Suites, Press Boxes, and Tents, as well as most of the food for the Concessions is produced in the Stadium kitchens. This allows for capture of a substantial volume of the food preparation wastes generated in the complex.



### Club Area, Luxury Suites, Press Boxes

- Club Area and Luxury Suites use buffet style food stations.
- Sodexo employees typically bus these areas. This system works well for compost collection as employees can control what goes into the collection containers.
- Switching to largely compostable service ware made it relatively easy for employees to place most waste in compost containers.



## Corporate Tents

- There were nine corporate tents at the pilot collection event. Each tent is staffed by two Sodexo employees.
- Corporate Tents have buffet style food stations. Tents vary in the refreshments and food provided. Tables and chairs are provided for participants.
- Typically participants leave their plates and service ware on the tables upon completion of their meals.
- As with the Club Area, Luxury Suites, and Press Boxes, Sodexo employees are primarily responsible for bussing tables. However, as recycling and trash receptacles are placed inside of the tents, some participants bus their own plates when finished with their meal.



## **Materials Generated**

All food for the Stadium Club areas, Luxury Suites and press areas, as well as the Corporate Tents on game day is prepared in the Stadium Kitchen. Kitchen prep scraps include a wide-range of vegetables, fruits, cheese rinds, meat scraps, and more. Food wastes were generated in all areas, along with soiled paper napkins and paper plates, and compostable plastic cups. Food is served buffet style in all locations. Kitchen managers do an excellent job of preparing just enough food to meet the service needs for game day with limited leftovers. Moreover, food is provided as a part of the ticket price paid by patrons, encouraging patrons to indulge. The majority of wastes collected for composting from the pilot event areas, other than the kitchen, were soiled paper plates and napkins.

## **Promotion & Signage**

All carts were labeled with signage “food waste only” with a list of acceptable and non-acceptable items.



## **Recycling Results & Environmental Benefits**

For the six games of the 2009 - 2010 season, plus several catered events held during the period, 3.35 tons of food waste, soiled paper, and compostable service ware was collected for composting, along with 4.25 tons pounds of recyclables. Using [NERC's Environmental Benefits Calculator](#), Sodexo food waste diversion and recycling efforts resulted in a reduction of more than 4.62 metric tons of carbon equivalent (MTCE) of greenhouse gases (compared to if the material would have been landfilled), a net energy savings of 123.21 million BTUs—enough to supply 100 percent of the energy for a household for a year or 991.69 gallons of gasoline saved.

## Recommendations based upon the Pilot Collection

Sodexo's management support and integration of composting and recycling into their employee duties was effective in diverting compostable material from the waste stream in the targeted area. Capturing additional compostable materials from the arena during football games and the tailgating area will require a more substantial commitment of Sodexo staff. See Attachment A for the Food Waste Management Plan that includes suggestions for implementing this expansion.



### Recommendations:

- Continued expansion of the use of biodegradable packaging and compostable service ware and utensils will increase collection efficiency and reduce trash generation.
- Elimination of individual chip bags, individual condiment packages, and similar items will increase efficiency in collection by Sodexo employees and ensure that these items do not end up contaminating the compost stream.
- Adoption of greater reuse throughout the areas of the pilot and the Stadium complex.
  - Consider working with suppliers/distributors to provide supplies in reusable crates. This would eliminate the need for staff to breakdown cardboard boxes and collect for recycling.
  - In the Club Area and Luxury Suites area, consider using reusable, durable, washable containers for pretzels, chips, salsa, etc. Consider donating un-served, refrigerated or frozen food and unopened food that does not need refrigeration to local food banks.
  - Donate or reuse materials following events (building supplies, plants, centerpieces, decorations, etc).
- Recycling bins in the Stadium perimeter should be more visible and placed so that bins are clearly in view without obstructions.
- Large signage should be placed directly on the recycling containers. Preferably a sign overhead as well to make the recycling stations more visible.
- Recycling bins should be placed at all entry/exit gates to capture containers as participants exit the stadium.
- Sodexo and UConn could benefit from increased outreach for “green” sponsorship (signage on collection bins, etc.) and promotion. More signage promoting composting and recycling would increase visibility and recognition. A “Sodexo Goes Green” or similar page on the Rentschler Field webpage would benefit both Sodexo and UConn.





## Conclusion

The Sodexo Company's addition of food waste and other materials for diversion from the waste stream at their catered events and its willingness to initiate a pilot event at the UConn football games indicates its commitment to reducing the waste stream and greening the company. Sodexo has stated that it intends to continue with its composting efforts during the 2010 - 11 football season and catering events.

A move toward purchasing compostable service ware for use throughout the Stadium was essential to the success at the pilot. Training and integrating diversion of recyclables and compostable materials into the regular duties of Sodexo staff was also essential. The kitchen manager and staff were impressive in their willingness to participate in the food diversion pilot.

The Sodexo Company's efforts reflect the goals of its parent company, Sodexo, Inc. in its "The Better Tomorrow Plan" to source and promote sustainable supplies, reduce both organic and nonorganic waste by 2015, and other sustainable measures.

The success of implementation of both composting and recycling at Rentschler Field presents a model for other stadium complexes. According to the 2009 Collegiate Athletic Department Sustainability Survey Report, three out of four NCAA FBS (Football Bowl Subdivision) report that sustainability initiatives are a "very high" or "high" priority for their campus. However, athletic departments lag behind in adopting and implementing sustainability plans. Implementing recycling and composting is a significant step on a path for greater sustainability at Rentschler Field.

***NERC would like to extend its appreciation to the staff at the Connecticut Department of Environmental Protection and the Sodexo Company for their invaluable assistance and dedication in making this project a success.***



## **Attachment A: Food Waste Management Plan**

### **Sodexo Sports & Leisure Rentschler Field**

#### **Overview**

This Food Waste Management Plan (FWMP) reflects the results of a waste assessment and pilot food waste diversion project conducted on September 12, 2009 at the first football game of the season at the University of Connecticut Huskies Rentschler Field. The waste assessment was jointly conducted by staff from the Northeast Recycling Council (NERC) and Connecticut Department of Environmental Protection (CT DEP). The project was conducted as a part an EPA New England Resource Conservation Challenge Grant awarded to NERC to conduct food waste composting pilots at special waste events.

The assessment consisted of a walk-through of the following Stadium areas: Corporate Tents, Club areas, Luxury Suites, press areas, kitchen and pantries, tailgating, and concession stands. The waste survey consisted of visual observation and recording of the types of food served, packaging used, and wastes generated, as well as in-depth discussions with the Sodexo manager responsible for catering and concessions and other pertinent staff and concessionaires.

<b>SECTION 1. EVENT SYNOPSIS</b>	
<b>Name of Event/Organizer</b>	Sodexo Sports & Leisure, Rentschler Field Sodexo is the concessionaire and caterer that manages all concession and food service operations at Rentschler Field for both event-day requirements and private parties and meetings. Sodexo provides basic concessions and gourmet catering.
<b>Contact</b>	Joanne Gagnon <a href="mailto:Joanne.gagnon@sodexo.com">Joanne.gagnon@sodexo.com</a>
<b>Event Description</b>	The primary tenant of Rentschler Field is the University of Connecticut Huskies Football Team. Six Football games occur during the season (September – January); catering events throughout the year. Recycling and composting were implemented in the following stadium areas for the 2009 football season: <ul style="list-style-type: none"> <li>▶ Club Area: 635 people can be seated in the Club area.</li> <li>▶ Luxury Suites (Skyboxes): There are 38 Luxury Suites, each holding up to 20 people per suite.</li> <li>▶ Corporate Tents: Each game has 2-10 large tents sponsored by corporations or Alumni. Tents are open approximately 2 hours before the game and close when the game starts.</li> <li>▶ Press and Media Boxes.</li> </ul>
<b>Location of Event</b>	<a href="#">Rentschler Field</a> , East Hartford, Connecticut
<b>Duration of Event</b>	Year round
<b>Venue Description</b>	Rentschler Field is Connecticut's sports and entertainment stadium owned by the State of Connecticut. In addition to being the home of the University of Connecticut Huskies football team, Rentschler Field's 40,000-seat stadium serves as a venue for concerts, conferences, banquets, and special events.
<b>Approximate Number of Participants in Pilot</b>	Approximately 1,500 in the Concession, Catering, and Club sections and 500 to 1,000 at Corporate Tents for each game.
<b>Concessions/Catering</b>	Sodexo has full control of food preparation in the facility. The facility features more than 7500+ square feet of meeting/reception space, including the Club Area and Skyboxes. Sodexo provides multiple menu choices as well as customized menu options. The Club Level includes two full service bars, a full service concession stand, and a preparation area for up to 800 people. Sodexo also provides catering services and staffing for Corporate Tents opened prior to each football game.  The outside perimeter concourse level of the stadium has 16 concession stands which have complete food preparation; two additional locations only equipped for vending. There are novelty & merchandise stands located on the outside perimeter concourse level of the north and south side of the stadium.  The southeast side of the stadium lower level provides the appropriate kitchen/preparation space, office space, and employee space.
<b>Event Activities</b>	UConn Football games, meetings, trade shows, banquets, fundraising dinners, weddings, other celebrations

<p><b>Existing Solid Waste Facilities, Services, &amp; Practices</b></p>	<p>Sodexo employees provide clean-up and custodial services throughout the venue. The Stadium Management contracts for removal of all waste from the Stadium property. Rentschler Field also offers opportunities for non-profit groups to earn extra money by helping to clean the stadium property (specifically the Tailgating areas). Groups conduct the cleaning the morning after each game. "Bottle pickers" are allowed into the tailgating areas the morning following a game to pick through trash left behind in order to collect redeemable beverage containers.</p>
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## **SECTION 2. WASTE COMPOSITION, GENERATION, & QUANTITIES**

A food waste assessment chart was created to keep track of kitchen, catering, and concessionaire wastes at the Stadium. As a part of the waste assessment, kitchen staff, Sodexo employees, and concessionaires were asked questions about specific waste items, clarification of reuse, recycling, and disposal practices, and potential options for reuse and/or substitution to recyclable or compostable products. The chart below contains a summary of this information.

<b>Area</b>	<b>Reusable</b>	<b>Recyclable</b>	<b>Compostable</b>	<b>Items that could be converted to reusable or compostable</b>	<b>Trash</b>
Kitchen Prep Area	<ul style="list-style-type: none"> <li>▪ Plastic bags</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grease</li> <li>▪ Bi-metal juice cans</li> <li>▪ Aluminum foil</li> <li>▪ Cardboard</li> <li>▪ Boxboard</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fruit rinds (lemons, oranges, banana peels, other)</li> <li>▪ Vegetables/salad fixings</li> <li>▪ Coffee grounds/filters</li> <li>▪ Other food</li> </ul>		<ul style="list-style-type: none"> <li>▪ Plastic wrap</li> <li>▪ Soiled plastic bags</li> <li>▪ Other plastics</li> </ul>
Tents & Club Areas	<ul style="list-style-type: none"> <li>▪ Condiments in bulk</li> <li>▪ Bulk coffee dispenser</li> <li>▪ Draft beer &amp; soda</li> <li>▪ Punch in large bowls</li> </ul>	<ul style="list-style-type: none"> <li>▪ Glass beer bottles</li> <li>▪ Glass wine &amp; liquor bottles</li> <li>▪ Plastic soda bottles &amp; cans</li> <li>▪ Plastic water bottles</li> <li>▪ Plastic juice containers</li> <li>▪ Milk cartons</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pork sandwiches</li> <li>▪ Hamburgers</li> <li>▪ Hot dogs</li> <li>▪ Deli sandwiches</li> <li>▪ Salad</li> <li>▪ Bread/rolls</li> <li>▪ Chips &amp; salsa</li> <li>▪ Vegetables &amp; dips</li> <li>▪ Cookies,</li> <li>▪ Candies</li> <li>▪ Fruit</li> <li>▪ Ice cream</li> <li>▪ Other food</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plastic single-serve cereal containers.</li> <li>▪ Individual butter servings</li> <li>▪ Plastic bowls for chips, salsa, veggies, candies</li> <li>▪ Plastic trays for pastries</li> <li>▪ Plastic sheet covering table top trays</li> <li>▪ Plastic wrapped utensils/napkins</li> <li>▪ Plastic serving trays for meats &amp; cheeses</li> <li>▪ Individual condiments</li> <li>▪ Individual chip bags</li> </ul>	<ul style="list-style-type: none"> <li>▪ Chip bags</li> <li>▪ Plastic gloves</li> </ul>

Area	Reusable	Recyclable	Compostable	Items that could be converted to reusable or compostable	Trash
Tent & Club Areas ▶ Service ware	<ul style="list-style-type: none"> <li>▪ Plastic serving trays</li> <li>▪ Metal hot trays</li> <li>▪ Serving utensils</li> <li>▪ Cloth tablecloth</li> </ul>	<ul style="list-style-type: none"> <li>▪ Foil</li> </ul>	<ul style="list-style-type: none"> <li>▪ Paper plates &amp; bowls</li> <li>▪ Compostable plastic cold cups</li> <li>▪ Paper hot cups</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plastic utensils</li> <li>▪ Plastic cups</li> <li>▪ Specialized (“martini”) plastic drink cups</li> <li>▪ Polystyrene foam cups for ice cream</li> <li>▪ Individual condiments</li> <li>▪ Individual creamers</li> </ul>	
Concession Area ▶ Food ▶ Beverages	<ul style="list-style-type: none"> <li>▪ Draft beer &amp; Soda</li> </ul>	<ul style="list-style-type: none"> <li>▪ PET soda &amp; beer bottles</li> <li>▪ PET water bottles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hot Dogs</li> <li>▪ Sausages</li> <li>▪ Hamburger &amp; Cheese Burgers</li> <li>▪ Grilled Chicken Sandwich</li> <li>▪ Pizza</li> <li>▪ Fries</li> <li>▪ Popcorn</li> <li>▪ Peanuts</li> <li>▪ Nachos</li> <li>▪ Pretzels</li> <li>▪ Candy &amp; sweets</li> <li>▪ Baked Goods</li> <li>▪ Ice Cream</li> <li>▪ Pretzels</li> <li>▪ Candy</li> <li>▪ Other food</li> </ul>	<ul style="list-style-type: none"> <li>▪ Individual relish condiments</li> <li>▪ Individual creamers</li> </ul>	
Concession Area ▶ Service ware		<ul style="list-style-type: none"> <li>▪ Foil</li> </ul>	<ul style="list-style-type: none"> <li>▪ Paper plates &amp; bowls</li> <li>▪ Paper cups</li> <li>▪ Paper popcorn bags</li> <li>▪ Napkins</li> <li>▪ Wooden coffee stirrers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plastic utensils</li> <li>▪ Plastic cups</li> <li>▪ Plastic cup lids</li> <li>▪ Plastic nacho serving trays</li> </ul>	<ul style="list-style-type: none"> <li>▪ Candy wrappers</li> <li>▪ Nut wrappers</li> <li>▪ Chip bags</li> <li>▪ Cracker Jack boxes</li> <li>▪ Straws</li> </ul>

Material quantities (weight) based on the six games of the 2009 - 2010 season, plus catering events:

- Food waste: 3.35 tons of food waste, soiled paper products, and compostable service ware was collected for composting. Grease collected was 1.5 tons.
- Recyclables: 4.25 tons of cardboard, beverage containers, scrap metals, and fluorescent light bulbs.
- Trash: 36.65 tons.

### **SECTION 3. SOURCE REDUCTION, REUSE, RECYCLING, COLLECTION OF COMPOSTABLE MATERIALS**

#### **REUSE**

##### **Source Reduction and Reuse practiced at the Stadium**

- Ketchup and mustard condiments within the Stadium area were in bulk pump-type containers.
- Use of buffet style serving platters in the Club Area and Luxury Suites, as well as Corporate Tents.

##### **Recommendations for Additional Source Reduction and Reuse**

- Consider working with suppliers/distributors to provide supplies in reusable crates. This would eliminate the need for staff to breakdown cardboard boxes and collect for recycling.
- In the Club Area and Luxury Suites area, consider using reusable, durable, washable containers for pretzels, chips, salsa, etc.
- Consider donating un-served, refrigerated or frozen food and unopened food that does not need refrigeration to local food banks.
- Donate or reuse materials following events (building supplies, plants, centerpieces, decorations, etc).

#### **RECYCLING**

##### **Current recycling at the Stadium**

###### **Kitchen, Club Area, Luxury Suites, and Corporate Tents:**

- Cardboard is stacked aside for Sodexo crews to break down and collect.
- Beverage container recycling was implemented in the 2009 season. 65-gallon carts on wheels were provided by the hauler.
- Recycling collection containers are located in the kitchen area for kitchen staff.
- Recycling containers were located in pantry areas in the Club and Luxury Suites, the main dining area, as well as in other out-of-the-way locations for access by Sodexo employees. (Sodexo bus tables in these areas).

- Bins were in the center or on the side of Corporate Tents for use by participants and Sodexo employees.

### Stadium Perimeter

- Cardboard recycling throughout the Stadium complex has been in practice for a number of years.
- In the stadium area, concessionaire workers breakdown boxes and sit them aside for pick-up by Sodexo staff using shuttles.
- Beverage container recycling was implemented in the 2009 season. A limited number of beverage container recycling collection bins have been placed around the Stadium perimeter for attendees to use. The recycling bins, however, were often blocked from view by trash cans, stairwells, or other obstructions.
- Bins are a good design; however, there were too few of them and only small signage was placed on the containers.

### Tailgate Area

- No formal recycling is conducted. Conversations with tailgaters indicated that many do recycle their own containers; some also collect from other tailgaters.

## **Suggested changes to increase recycling and improve efficiency**

### Tents

- A small amount of cardboard was placed in trash receptacles in the tents. Perhaps boxes can be broken down and placed next to recycling bins.
- Milk cartons and aseptic containers should be added to the recycling collection.

### Stadium

- Bins should be more plentiful, visible and obstructions removed.
- Large signage should be placed directly on the containers. Preferably a sign overhead as well to make the recycling stations more visible.
- Recycling bins should be placed at all entry/exit gates to capture containers as participants exit the stadium.

### Tailgate area

- As tailgaters pass through the Stadium gates they could be provided clear plastic bags for collection of recyclables. Instruct tailgaters to leave bags of recyclables for the nonprofit groups that clean-up the area or give to other tailgaters that collect recyclables.
- Dispensing of bags may help reduce the leaving of trash and recyclables.





## **COMPOST COLLECTION**

### **Suggested Materials to be collected for composting**

Food scraps, paper napkins, paper plates, paper bowls, other paper waste, compostable plastic service ware.

### **Number, Type & Capacity of Compost Collection Bins**

For the pilot compost events, green carts on wheels (68 gallon) were provided by the hauler.

### **Location of Compost Collection Containers during Pilot Collection**

#### Kitchen Area

- Collection carts were located next to the recycling containers for convenient use by kitchen staff.

#### Club Area, Luxury Suites, Press Boxes

- Collection carts were placed in the pantry areas and other out-of-the-way locations for easy access by Sodexo employees.
- Concern over unsightliness and space limitations inside the participant gathering areas limited container placement, however Sodexo employees typically bus these areas so bin placement was satisfactory for this purpose.

#### Corporate Tents

- Carts were placed outside of each tent.

### **Compost Collection Logistics**

#### Kitchen Area

- Virtually all food for the Club Area, Luxury Suites, Press Boxes, and Tents, as well as most of the food for the Concessions is produced in the Stadium kitchens. This allows for the capture of a substantial percentage of the food preparation wastes generated in the complex.

#### Club Area, Luxury Suites, Press Boxes

- Club Area and Luxury Suites are provided buffet style food stations.
- Sodexo employees typically bus these areas. This system works well for compost collection as employees can control what goes into the collection containers.
- Switching to largely compostable service ware made it relatively easy for employees to place most waste in compost containers.

#### Corporate Tents

- Corporate Tents have buffet style food stations.
- As with the Club Area, Luxury Suites, and Press Boxes, Sodexo employees are primarily responsible for bussing tables. However, as recycling and trash receptacles are placed inside of the tents, some participants do bus their own plates when finished with their meal.

## **Suggested changes to increase composting and improve efficiency**

### All areas:

- Continued expansion of the use of compostable packaging, service ware, and utensils will serve to increase collection efficiency and reduce trash generation.
- Elimination of individual chip bags, individual condiment packages, and similar items will increase efficiency in collection by Sodexo employees and ensure that these items do not end up contaminating the compost stream.
- Individual condiment packages tended to stick to plates and presented a problem for staff to efficiently separate from plates prior to composting.

### Corporate Tents

- Recommend placement of compost bins inside of tents and elimination or reduction of waste receptacles inside of each tent.
- This will serve to capture compostable waste from participants who do bus their own plates and promote Sodexo's composting and "greening" efforts.
- Designate a roving Sodexo employee to visit the tents prior to the opening of the tents to ensure that all staff understand what is compostable, what is recyclable, and what is not.

## **Recommendations for Expansion to Concessionaires, Stadium, & Tailgating Area**

### Concessionaires

Much of the prep scraps generated in food served at the Concessions is discarded at the kitchen level. However, hot dogs, hamburgers, popcorn, and similar items are prepared at the concession stands. While most of the items are served there will be some items that remain at the end of the event or were not prepared properly so become waste. Some soiled paper will also be generated.

- Add to the contract with concessionaire nonprofit groups the requirement of separating food scraps and soiled paper for compost collection.
- Include compost separation in food service trainings or meetings provided to concession stand managers and workers.
- Space constraints will be a concern. Use of "Slim Jim" type bins (tall, narrow, 20 gallon containers) or small carts on wheels should be adequate and fit into limited space.
- Place clear signage on the bins; include pictures of common compostable items that will be generated at the concession stands.
- Assign Sodexo staff to monitor compliance and check for contamination of collection carts.
- Integrate removal of carts and emptying into Sodexo employee recycling and solid waste duties.

### Stadium Football Events

- Continued expansion of the use of compostable service ware in the Concession stands will be required for effective diversion of compostable materials from Stadium attendees.
- Due to the nature of Concessions, there will undoubtedly always be some waste that is not recyclable or compostable, including candy wrappers, Cracker Jack boxes, etc. However, elimination of remaining disposable condiments (primarily relish and creamer), as well as switching nacho plates to paper or compostable plastic would help increase items that can be diverted to composting.
- As much of the trash is left behind in the arena seating area, Boy Scout Troops that do the cleanup can be supplied with compostable bags for collection of food scraps, soiled paper, and compostable plastics.
- Location of a few strategically placed “Zero Waste Stations” for collection of recyclables, compostable materials, and trash would also serve to capture materials from attendees. Additionally these Stations would provide a means to promote “Green” sponsors and Sodexo’s greening efforts to the public. Additional Bin Stations can be phased in to better capture all the arena waste.

### Tailgating areas

- As with recycling, there is currently no organized collection of compostable materials. Since these materials have no value to tailgaters it is doubtful that anyone collects items for home composting.
- Compostable bags could be supplied to tailgaters for composting, along with clear instructions on what is and what is not compostable. These bags could be left at the tailgating area for the next day clean-up by nonprofit groups.

### **Other green practices currently in place at Rentschler Field**

- Use of post-consumer, recycled content napkins throughout the Stadium.
- Purchasing of Greencycle Greenware compostable service ware and paper service ware.

## **SECTION 4. COMMUNICATION & PROMOTION**

### **Container Labels/Signage & Bin Station Signage**

#### Signage used during the compost pilot:

- A list of acceptable and non-acceptable items was placed on each compost bin along with a large decal on the top of the container that said food waste only.

#### Recommendations for Improved Signage

- Ensure all recycling and compost collection containers are marked with signage on all accessible sides.
  - Signs should clearly and simply say what is acceptable in the bins.
  - Use pictures or samples of items to be composted (or recycled). This is particularly important for recycling containers located in the Stadium and for compost collection containers that will be used in Concession areas.

- For carts used outdoors, signage should be waterproof.
- Place signs behind the Bin Stations at eye level so that event attendees can see them from a distance. See Attachment B for samples.

### Additional Outreach & Promotion

Adopting recycling and composting as a part of a comprehensive sustainability strategy can help sports organizations to leverage their brand identity and visibility. The strategy can help the sports organization gain from associated cost savings from trash reduction and to capitalize on program “green” sponsorship and advertising.

- Sodexo placed a sign on the Club food service table “Sodexo is proud to use biodegradable plates, cups, and napkins.”

### Recommendations for outreach to public and seeking sponsors

- Include food diversion project and recycling information in event brochures, program, and all other event information.
- Make public announcements over the sound system and scoreboard during the event.
- Share waste prevention, food diversion, and recycling successes with the public by issuing press releases.
- Post successes on the company website. A “Sodexo Goes Green” or similar page on the Rentschler Field webpage would benefit both Sodexo and UConn.
- Solicit “green” sponsors by offering advertising space on collection carts and container signage.

## **SECTION 5. STAFFING**

### Staff Training

Training was provided to all employees at an annual meeting held in August. Although employees are required to attend the meeting inevitably some employees miss the training. A means to train these employees should be instituted.

### Staff Duties

Sodexo effectively integrated composting into their staff duties for the compost pilot. Employees responsible for bussing tables in the Club Area, Luxury Suites, and Press Area, as well as the Corporate Tents and Kitchen Areas appeared to understand their new duties and complied with the requirements. Employees were able to efficiently and effectively separate food scraps, soiled paper, and compostable plastics to the compost collection containers.

Expansion of composting to the Concession stands, Stadium attendees, and tailgating will require additional Sodexo staffing for training and monitoring of Concessionaires and staffing of bin stations around the Stadium perimeter.

## **SECTION 6. EVALUATION**

- Work with the compost collector or processor to weigh or estimate volumes of materials diverted through composting.
- Ask the compost processor if there were any problems with contamination.
- Take photos of the event composting and recycling.
- Ask staff for comments about the composting effort.
- Prepare a brief report on the project including strategies used, amount of material diverted, comments and suggestions from participants and future recommendations. Share the results with Sodexo managers and staff. Prepare a press release on results.
- Evaluate the costs of composting and recycling vs. the cost of not composting and recycling service.
- Document the amount of compostable products purchased that replaced plastic products.
- Use recycling and disposal quantities as a benchmark for subsequent events.
- Use the NERC [Environmental Benefits Calculator](#) or the [EPA WARM tool](#) to determine resource use savings and greenhouse gas reductions from recycling and composting.

## Attachment B

### Sample Signage and Bin Placement



### UC Davis Aggie Stadium



**University of Colorado Stadium recycling program**



**Recycling at Yale Football Stadium**