

## Food Waste Diversion, Recycling, and Green Purchasing at the Sheraton Hotel & Conference Center, Burlington, Vermont

Increasing recycling, implementing a food waste collection program for composting, and increasing green purchasing have allowed the [Sheraton Hotel & Conference Center](http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=606&EM=VTY_S I_burlington_606_overview) ([http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=606&EM=VTY\\_S I\\_burlington\\_606\\_overview](http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=606&EM=VTY_S I_burlington_606_overview)) to reduce its environmental footprint, save money on disposal, and to be recognized as a Green Hotel through the [Green Hotels in the Green Mountain State](http://www.vtgreenhotels.org) ([www.vtgreenhotels.org](http://www.vtgreenhotels.org)) (also known as the Vermont Green Hotels Program), and [EPA New England](http://www.epa.gov/aboutepa/region1.html) (<http://www.epa.gov/aboutepa/region1.html>).

In April 2009, the Sheraton Hotel agreed to work with the [Northeast Recycling Council \(NERC\)](http://www.nerc.org) ([www.nerc.org](http://www.nerc.org)), the Vermont Green Hotels Program, and [EPA New England](http://www.epa.gov/aboutepa/region1.html) (<http://www.epa.gov/aboutepa/region1.html>) to increase its overall recycling, initiate a food waste diversion program, and to increase and document its green purchasing efforts. These efforts further supported the Hotel's environmentally conscious business practices and made it recognized as a Green Hotel in the State of Vermont.



*With 309 sleeping rooms, the Sheraton Hotel is the largest hotel and conference center in Vermont.*

### Facts at a Glance

- The Sheraton has 309 sleeping rooms and is the largest conference center in the State.
- The Hotel is now recognized as a Green Hotel in the Vermont Green Hotels program.
- Since April 2009
  - The Hotel has increased its recycling rate from 7% of total discards to 12%.
  - Has collected 99 tons of food waste for composting (28% of total discards). And,
  - Has increased and documented the use of green products—30% post-consumer recycled content copy paper, PLA cornstarch “to go” containers, and a line of green cleaners.

### Program Overview

The Sheraton Hotel & Conference Center, located in the northwest corner of Vermont, is a well-known establishment to Vermonters and out-of-state travelers for its luxurious sleeping rooms and conference facility, as well as its proximity to downtown Burlington (Vermont's largest city). The Hotel attracts business travelers, families, and winter sports enthusiasts.

The Sheraton senior management agreed to work with NERC and the Vermont Green Hotels Program to further its environmental awareness and the Hotel's operational sustainability. As part of this working agreement, NERC provided Hotel management and staff with direct technical assistance on recycling, composting, and green purchasing issues. The Vermont Green Hotels Program provided assistance on the details and documentation necessary to achieve Green Hotel status, including information on green purchasing, and energy and water efficiency. This collaborative effort led to a successful outcome for the Hotel.

Three goals defined the work with the Hotel. The goals targeted the areas management felt needed the most assistance in order to achieve Green Hotel status. They included:

- Rejuvenating the Hotel's existing recycling program,
- Developing and assisting with the implementation of a food waste collection program, and
- Assessing and expanding the number of environmentally preferable products used by the Hotel.

### **Recycling Program**

The Hotel's existing recycling program had been initiated many years prior to the present management. It includes the diversion of cardboard, printing and writing paper, and beverage and food containers. Over the years, this program has run on its own momentum. The one recent change made to it was the placement of a recycling bin in each guest room to capture guests' recyclables. It was obvious that by 2009, the recycling program was in need of a thorough evaluation and re-strategizing effort since it was capturing only 7% of the total Hotel's discards.

NERC worked with Hotel management to conduct a waste sort for the Hotel. All management and staff were invited to watch and participate in the sort while NERC and staff from the Chittenden Solid Waste District, the Vermont Agency of Natural Resources, and EPA New England sifted through one day's trash to determine how much of the trash was recyclable. By witnessing this process, management and staff were able to get a first-hand look at the types of items that were being discarded at the Hotel and the volume of recyclables that were being thrown out.

The waste sort revealed that the Hotel's discards were 78% recyclable. Of these recyclables, food waste totaled 59% by weight of the total discards, beverage containers 10%, and paper 8%. Since each bag of sorted trash was labeled with the department from which it was collected, it was easy to determine where in the Hotel the different discarded recyclables were being generated.



One of the chefs helping out with the waste sort.

Based on the sort data, it was obvious that a substantial amount of recyclables was being generated in the guest rooms. Hotel management also determined that improving the recycling in the guest rooms was its biggest challenge and the area in which they wanted NERC's input. A two-pronged strategy was adopted to address this issue. While management worked on information that could be shared with guests regarding the recycling program, NERC began planning a recycling training for the guest room staff. NERC invited staff from the Chittenden Solid Waste District to participate in the training, so they could present definitive information about what was acceptable recyclables in the Burlington area.

The training was conducted by first showing a variety of items that are commonly found in Hotel trash and identifying which ones are recyclable. The training continued with a discussion about how staff could incorporate more recycling into its daily routine of cleaning rooms without it being burdensome or time-consuming. As a result, staff suggested the following ways they could support and promote the Hotel's recycling program: adding a plastic bag to its cleaning carts to dump the recycling from the guest room recycling bins; recycling recyclables that were left on counters and floors instead of throwing them in the trash' and helping guests better understand the Hotel's recycling program by answering any questions they have on the Hotel's recycling program.

In addition, management developed information on the Hotel's recycling program for the guest information packet provided in each room, and placed recycling bins near printers in public use areas. The front desk staff were also trained to mention the Hotel's recycling program to guests when appropriate. Senior management also requires middle management to continue reminding staff that recycling is a requirement at the Sheraton via staff meetings.

After working with the Sheraton for 29 months, the recycling rate increased from 7% to 12% of the total discards.

### **Food Waste Collection for Composting**

Based on the waste sort conducted by NERC, food waste was more than half of the Sheraton's waste stream. Given the volume and weight of the food waste and the related cost of disposal fees, finding an alternative management system for this material became a top priority for the Hotel.

The Head Chef, assisted by the Director of Environmental Services spearheaded the Hotel's food waste collection program. They determined that the Hotel's existing waste and recycling hauler also hauled food waste to a local composting facility-- [Intervale Compost Products](http://www.intervalecompost.net/) (<http://www.intervalecompost.net/>). Once agreements with the hauler were in place, the details for the Hotel's food waste collection program were promptly identified. Staff were informed of this program by management and then met with NERC to discuss the importance of composting and why the food waste collection program was important for the Hotel and the environment.

The Hotel collects kitchen prep waste and plate waste from banquets, the bar, and the restaurant. In the kitchen, staff uses 5-gallon reusable food buckets at each work station to collect discards. Individual staff are responsible for emptying its container into the food waste toter at a designated location in the kitchen. Each night the last staff in the kitchen transfers the toter to the walk-in cooler for overnight storage. The first person who arrives in the morning is responsible for taking the toter out of the cooler and placing it back in the kitchen. When full, the toter



is brought to a designated area near the exterior loading dock for pick up by the hauler. The hauler picks up the food waste on a daily basis so odors don't become a problem.

To date, the Sheraton has collected 99 tons of food waste for composting. When asked why the transition to collecting food waste has been so successful at the Hotel, management thinks it's because the number of kitchen staff (10 people) is small and it is easy to get the message to each person. Staff has also expressed its satisfaction with the Hotel deciding to implement the program and the positive effect it has on the environment. Management has also talked about composting at staff meetings and has made it clear that everyone (management and staff) are expected to participate in the program.

The Sheraton's present composting rate is 28% of the total discards.

Several other positive outcomes from implementing the food waste collection program include:

- Management removing the garbage disposal from the Hotel's kitchen because it is no longer needed. By discontinuing the use of the disposal, the Hotel has eliminated the use of water for managing the food waste and the BOD load on the city's waste water system.
- The Sheraton Corporation recognized the Hotel for its reuse of the 5-gallon buckets for its food collection as a best management practice. This information has been shared with other Sheraton Hotels throughout the country.

### **Green Purchasing**

Part of the required documentation for applying to the Vermont Green Hotels Program is a list of the green products purchased by each hotel. At least three product categories purchased by each hotel must be green to be recognized by the Program. For the Sheraton, going through this review process allowed it to see all the green products they were already purchasing—a variety of green cleaners and "to go" containers. It also helped to identify where it could increase its green products inventory—recycled copy paper with 30% post-consumer content. The copy paper was easily acquired from its distributor and the paper is now used throughout the facility.

### **Challenges & Solutions**

**Challenge:** Convincing the senior management that the time and effort spent on achieving the Green Hotel status with the Vermont Program would be worth it.

**Solution:** NERC and the Vermont Green Hotels Program staff met with Hotel management to discuss the details of the Green Hotels Program and the free technical assistance that NERC would provide through the EPA grant to assist them with this effort. The benefits for the Hotel's participation would result in a rejuvenated recycling program, a working food waste collection program, and eligibility towards achieving Green Hotel status.

**Challenge:** Developing a food waste collection program that would not create odor problems.

**Solution:** The Head Chef and Director of Environmental Services were able to negotiate with the hauler to pick up the totes each day. The Head Chef also determined that odors could be minimized by making sure the tote is placed in the walk-in cooler overnight.

**Challenge:** During the first few months of collecting the food waste in the kitchen, fruit flies occasionally became a problem.

**Solution:** The Head Chef instructed staff to empty the 5-gallon buckets more frequently and to put them through the dishwasher at the end of each shift.

**Challenge:** Making sure the Hotel cleaning staff were able to get its questions answered about the Hotel's recycling program and how they could be most effective.

**Solution:** In addition to providing a recycling training specifically for the cleaning staff, NERC also spent time talking with individual staff while they were cleaning the rooms. This allowed them to speak freely about any barriers to recycling they faced.