

## LOCAL GOVERNMENT CASE STUDY:

# ORANGE COUNTY - FOOD WASTE DIVERSION PROGRAM



Jurisdiction:

Best Management Practice:

Purpose:

Orange County

Food Waste Diversion Program

Diverting food waste from the Orange County landfill has several benefits, including saving space and extending the life of the landfill. The diversion also reduces landfill methane production resulting from the anaerobic decomposition of organics. In addition, the program provides an extremely beneficial service to local businesses.

Ordinance:

None

Contact:

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## DESCRIPTION

A commercial food waste diversion program has operated in Orange County since 1996. The main intent of this program is to reduce the amount of organic waste sent to the landfill by offering a beneficial service to local businesses. The program, which has always been serviced by private contractors, has gone through several changes since its inception. Although originally used as animal feed, under the current program a local composting company collects the food waste from 20 establishments three times a week. Grocery stores, breweries, florists, coffee shops and numerous restaurants participate in the program. The transition from an animal feed end-product to composting has allowed the addition of nonedible organics such as paper plates, napkins and waxed cardboard. Businesses in Chapel Hill and Carrboro are offered the service at no charge under the following conditions: 1) they participate in the county's commercial glass, metal and plastics recycling program; 2) they must generate a minimum of two tons per month of food waste; 3) they must have adequate space for the collection containers; and 4) they must be serviceable by the collection vehicle. The county plans to expand service to cover the Town of Hillsborough in the near future.

## IMPLEMENTATION

When the program began in 1996, a local farmer collected the food waste six days per week for use as animal feed. The frequent collection schedule, combined with the need for all collected food to be cooked prior to use as animal feed, made the program very labor intensive. In addition, the

program had a very strict list of acceptable items, and even low levels of contamination created problems. Eventually, the farmer decided to get out of the swine industry and the program was taken over by a local composting company.

Under the current composting program, the food waste materials are placed in either 65-gallon roll carts or Dumpsters for service by a rear loader. It is the responsibility of the businesses to train employees to comply with the program standards. Program participants are encouraged to donate useable foods to organizations that help those in need. All containers are clearly labeled in both English and Spanish, indicating the list of acceptable items. The contractor collects three days a week from 17 stops in Chapel Hill and Carrboro. It should be noted that some stops serve multiple businesses, allowing smaller generators to meet the two-ton minimum by combining waste. Once collected, the contractor transports the materials to its composting facility (40 miles from Chapel Hill), which is permitted to accept food waste. To support the efficacy of the program and to "close the loop," the Orange County Solid Waste Management Division then purchases the compost from the contractor for sale to the citizens of Orange County. The profits from the compost sales are used to reduce the costs incurred for the food waste program.

## RESULTS

Since 1996, there has been a steady increase in food waste collected through the program. The FY 01-02 estimate of approximately 750 tons/year of food waste shows an increase of approximately 575 tons collected since the program began



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in 1996. The total cost of the program is \$75 per ton collected. This includes \$55 per ton to collect the materials and a \$20 tip fee at the composting facility. The food waste diversion program costs less than the \$80 per ton cost of the town of Chapel Hill's commercial garbage program. The overall savings from the program are even greater when revenues from composting sales are included in the calculations.

In addition, the three day per week collection of food waste has proven adequate for businesses and the health department. In fact, no participating business has had points deducted for issues related to the food waste program, though several have had points deducted for unacceptable refuse containers.



The N.C. Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and education on methods to eliminate, reduce, or recycle wastes before they become pollutants or require disposal. Call DPPEA at (919) 715.6500 or (800) 763-0136 or e-mail [nowaste@p2pays.org](mailto:nowaste@p2pays.org), or visit DPPEA's Web site at [www.p2pays.org](http://www.p2pays.org) for assistance with issues in this case study or any of your waste reduction concerns.