
CASE STUDY:

Residential Waste Cooking Oil Disposal Program

Location:	Cary, N.C. (Wake and Chatham County)
Industry:	NAICS 921190 General Government Support
Pollution Prevention Application:	Recycling of Residential Cooking Oil
Annual Savings:	Not Determined
Payback Period:	Not applicable
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Background

After a successful two month pilot, the town of Cary launched its full-time Residential Waste Cooking Oil Disposal Program on July 1, 2009. The program gives Cary residents the opportunity to properly dispose of household oil and grease by requesting a special pick up from the town. The used oil and grease are picked up curbside throughout Cary and then recycled into an environmentally beneficial bio-fuel, which is used by town government vehicles.

Program Requirements

To participate in the program, residents must call the town of Cary's Public Works and Utilities Customer Service Department.

- There is a minimum volume of one half gallon of waste oil and grease accumulation required prior to collection.
- Waste cooking oil and grease must be placed in a sealable food container, such as the original oil container, a coffee can or a soda/juice bottle.
- The container must be labeled "Waste Cooking Oil" and the container lid must be secured to prevent spillage.
- The container must be placed on the curb for pickup no later than 7 a.m. on the day of the scheduled pick up.
- For residents that may have an issue with collecting a half gallon, small volumes may be dropped off at the town Operations Center by appointment only.

Items Accepted:

- Cooking oil - vegetable, corn, peanut, sunflower, canola, olive, soybean, flaxseed or any combination of edible cooking oils
- Margarine

- Animal fats/Grease – tallow, lard, butter, shortening or any combination of animal fat
- Oil and fats can be mixed together in a single container

Items Not Accepted:

- Water, food sauces, gravies, large amounts of food particles, plastic, paper, motor oil, fuels, chemicals and detergents should not be mixed with the waste cooking oil.

Benefits

By offering a cooking oil and grease recycling option, these materials are being kept out of both the town sewer system and the local landfill.

These waste materials will be used in the production of a bio-fuel which will be used locally as an alternative to petroleum fuels. Bio-diesel is also a much cleaner-burning fuel and that can help with the local air quality. The town of Cary utilizes B-20 bio-diesel blend (20 percent bio-fuel and 80 percent diesel) in its fleet vehicles.

Triangle Biofuels, Inc. of Wilson, NC has been selected for collection and bio-fuel production of the used residential cooking oils. The town of Cary will receive 25 cents per gallon for used residential cooking oils collected within the program.

The program is collecting an average of approximately 100 gallons of cooking oil per month from residential pickups.

Cost of Program

The town of Cary has had to incur minimal costs to implement this program. The town already had a special curbside collection program in place where items such as motor oil, white goods and computers were being collected. The town already had staff in place that would follow solid waste routes to collect bulky items so it simply added the cooking oil to the other items for special pick up. The cooking oil is transported back to the town Operations Center where it is transferred to a bulk tank and then later collected by the third party bio-fuel manufacturer.