

Application: Solid Waste Assistance Grant – EPA-R3-LCD-07

Project Name: Food-scrap Collection at High-rise Apartment Buildings Demonstration Project

Project Location: City of Alexandria, Virginia

Applicant's Name and Address: Resource Recovery Division
Department of Transportation & Environmental Services
City of Alexandria, Virginia
2900 Business Center Drive, Alexandria, VA 22314

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Project Overview: The project is designed to demonstrate the operational feasibility of collecting food scraps for composting from high-rise apartment buildings in an urban setting. This project reflects the EPA's priority of increasing composting of food waste. Given that over 60% of Alexandria's residents live in multi-family housing with only limited on-site space for composting (like most of the rest of urban America), it is critical to show that food waste can be economically collected and delivered to off-site composting facilities from high-density housing units.

Project Management: The project, if funded, will be managed by staff from the Recycling Office of the Resource Recovery Division of the City of Alexandria. This division is responsible for regulating and managing solid waste disposal for a city of 134,000 residents. The Recycling Office consists of three full-time staff who manages the diversion of recoverable material from Alexandria's waste stream. The project lead is Michael Clem who has over 14 years of experience implementing environmental programs at the local government level. Most recently, he has established food waste collection at Alexandria's farmer's markets. Over 500 residents deliver food waste on a weekly basis to staffed collection stations for composting. Approximately 3 tons of food scraps are collected a month. Clem also implemented a food scrap collection program at the jail of Arlington County, Virginia. The jail program demonstrated that the cost of collecting food scraps could be offset by savings from diminished trash hauling and disposal fees.

Project Summary: Managers of three high-rise apartment buildings (600+ units) will be recruited to work with City staff to offer their residents the opportunity to deliver food scraps to central collection units located on-site. These food waste scraps will be collected by a commercial food waste hauling company and delivered to a regional composting facility. Residents of these buildings will be invited to an on-site training seminar on 'Living Green in the City'. This seminar will be used to sign-up participants. Those who choose to participate will receive instructions, a kitchen-top collection pail, and access to an on-line forum to provide experiential feedback. The program will last six months.

Measures of Success: The following metrics both quantitative and qualitative will be used to gauge the success of the program:

- Number of participants (weekly goal of 150 participants ‘dropping off’ food scraps)
- Amount of food waste collected (goal of 0.5 ton per week)
- Amount of contamination (plastic bags, recyclables, utensils)
- Complaints (odor, bugs, spillage, service irregularities)
- Service costs (hauling, processing, and cleaning)
- Qualitative feedback from participants (convenience, challenges, interest)
- Qualitative feedback from building management staff (maintenance issues)

In 2015, the Resource Recovery Division intends to pilot residential food waste collection at 800 single-family homes. The costs and feasibility of this single-family pilot program would be compared to the results of the multi-family program. Depending on the results, staff would focus future resources for expansion of the best option.

Communication, Collaboration, and Transferability: A project summary and results in the form of a presentation will be offered to the Recycling Sub-Committee of the Washington Metropolitan Council of Governments, the Maryland Recycling Network, the Virginia Recycling Association, the Apartment and Office Building Association of Metropolitan Washington, and the Northern Virginia Regional Planning Commission. A summary article will be written including photos and offered to trade publications pertaining to building management and waste management.

Implementation Schedule

February 1 – February 28: Recruit three apartment complex managers to work with city staff to offer food waste collection at their buildings.

March 1 – March 30: Set up collection sites in buildings, train maintenance staff, obtain kitchen countertop pails, prepare outreach and education material.

April 1 – May 30: Present ‘Living Green in the City’ seminars at selected apartment buildings and recruit participants. (Flyers will be distributed to residents and promotional posters hung in lobbies and elevators). Collection sites must be ready to go after the first seminar.

May – October: Collect data and promote participation

November – December: Write up results and prepare presentation

Budget: Staff cost = 130 hours @ \$27 per hour; Hauling/Processing cost = \$5,000; cost of kitchen countertop pails = \$1,000; promotional materials = \$500. **Total = \$10,000.**