Program Development

Current waste handling costs in southwestern Pennsylvania, among the lowest in the nation, have been a major deterrent to establishing composting and other alternative waste handling practices. However, as recycling goals and landfill costs increase, programs which allow for the diversion of large amounts of organic materials, including food waste, are needed. The Allegheny Food Waste Composting Coalition is proposing a food waste collection and composting pilot in the Greater Pittsburgh area. The pilot program will be designed to collect food waste from participating universities, grocery stores and hospitals in Pittsburgh and divert it from a landfill it to a regional composting facility for processing.

In January 2003, through a grant from the PA DEP, R.W. Beck completed an initial feasibility study for this project (see attachment). The results of the study indicate that if funding was available to defray much of the equipment costs, food waste composting could compete economically with current waste handling practices. However, a more detailed study is needed to further define the effect participation in this program would have on the waste handling costs and practices of interested institutions and businesses, and to determine the willingness of area institutions and businesses to participate in a pilot program.

Funding is requested to conduct further research and program development. Program development will focus on evaluating hauling and processing fees, volume and weight of waste materials, and labor associated with waste handling at participating institutions. This information will be compared to a detailed cost breakdown of the food waste collection and composting pilot, to determine the financial effect participation in the proposed pilot would have on interested institutions. Information from the research will be used to create a marketing brochure and presentation for recruiting institutions and businesses for the pilot. Further funding will be sought to implement the pilot within the following year.

A description of the tasks to be carried out during the research and program development phase is listed below. Tasks are not listed in order of completion.

I. Cost analysis of composting food waste at grocery stores, colleges and universities, hospitals, and restaurants.

Task #1 - Conduct a waste audit at two grocery stores, universities, and restaurant and one hospital to determine the following information:

- Composition of the food service waste stream by weight and volume
- Locations where food waste is generated
- Assessment of current waste handling infrastructure
- Pre-pick up storage capabilities
- Current waste handling cost structure
- Frequency of waste pick-up
- Food service and maintenance staffing requirements

- Current staff training practices

Methodology

- Initial questionnaire
- Site visits and interviews
- Waste sort (if required)
- On-going communication and follow-up

Task #2 - Research options for each component of the food collection and composting pilot to design the most cost effective system. Components to be researched include the following:

- Equipment
  - Truck
  - Liners
  - Bins
    - Type of bin
    - Swapping bin vs. washing on site
  - Washers
  - Peripheral equipment
    - Gloves
    - Boots
    - Aprons
    - Etc.
- Composting facilities/hauling company
  - Minimum amount of material required
  - Requirements for composition of waste materials
  - Processing fees
  - Hauling fees
  - End product distribution
- Staff Training and Signage
- Monitoring System

Information will be used to generate several models of the collection and composting system to be used for the pilot.

Methodology

- Research
- Site visits to Woodhue Composting Facility
- Interviews with composting facilities
  - Agricycle
  - Greater Pittsburgh Food Bank (potential facility)
  - Others

Combining the information gathered in Tasks 1 and 2, the following will be determined:

- The collection and composting system used during the pilot.
- The type and size of businesses and institutions targeted for the pilot

- Minimum amount of food waste needed for overall program cost effectiveness.
- Volume of available food waste from the study participants.
- Specific equipment needed for the food collection and composting pilot.
- Cost of equipment needed for the food collection and composting pilot.
- Cost per ton to haul and process food waste during the pilot program.
- The effect of this program on each institution's overall waste handling costs
- Pilot staffing requirements.
- An outline of the changes in waste handling practices currently in place at each of the participating institutions.

II. Institutions and businesses committed to participating in a food collection and composting pilot.

Task #3- Recruit area grocery stores, universities and colleges, hospitals, and restaurants to participate in the pilot.

- Design a marketing package on the food waste collection and composting program.
  - Description of pilot
  - Projected diversion rate.
  - Benefits and incentives
  - Projected cost
  - Description of training
  - Description of changes in waste handling practices.
- Solidify the commitment of the program development participants to participate in the pilot.
- Recruit additional businesses and institutions
  - Schedule and conduct meetings with administrators of perspective institutions.
  - Conduct abbreviated waste audits to determine volume and composition
  - Determine the cost assessment
- Secure letters of commitment for pilot.