WINDROW COMPOSTING
BUSINESS PLAN
FACILITIES MANAGEMENT INTEGRATED SOLID WASTE

SUMMARY

The University Facility Fee Advisory Board approved funding for the Windrow Composting Facility at Foothills Campus on April 8th 2016 and subsequently received approval from SFRB, VPUO, OGC and BOG for funding in the amount of $274,300 for the costs of constructing the facility including site preparation, equipment and permitting. No funding was approved for operating costs but Provost Rick Miranda stated in a meeting on April 15, 2016 that central base funding will be provided for compost operations with the expectation that it would be almost entirely offset by revenue streams associated with the facility and that Facilities Management will manage the program.

SERVICE AREA EXPANSION DETAILS

The windrow composting program will offer food waste and paper towel composting services to main campus RI buildings, residence halls, Lory Student Center, University Village apartments, International House apartments, Aggie Village Family apartments, Aggie Village North apartments, the Natural Resources Research Center and the National Center for Genetic Resources Preservation.

Note: The date when construction of the windrow composting site will be complete and ready to accept feedstock materials is currently January 2017.

FY17 Plans:

1. Technician II starts ½ time at windrow compost site.
4. Work with Lory Student Center staff to develop plans for back of house (pre-consumer) collection of feedstock materials for implementation in FY18.
5. Work with NRRC staff to develop plans for collection of paper towel and food waste for implementation in FY17.
6. Work with staff at Veterinary Teaching Hospital, University Greenhouses and Horticulture Center to develop procedures for preventing contamination of compostable feedstock materials for utilization in FY17.
7. Work with Horticulture Center to commence composting of plant material and soils in FY17.
8. Work with Facilities Management Custodial Services staff to develop procedures for collecting paper towel waste at Morgan Library and Clark buildings for implementation in FY18.
9. Work with Apartment Life staff to develop plans for composting grounds and food waste for implementation in FY18 or FY19.
10. Work with Housing Services staff to expand current composting operations in residence halls for implementation in FY18 or FY19.
11. Work with Fermentation Lab staff to develop plans for composting spent grain for implementation in February 2017.
12. Work with Outdoor Services Group staff to develop procedures to prevent contamination of leaves and grass clippings feedstock for implementation in FY17.

FY18 Plans:

1. Begin collection of Lory Student Center coffee shops pre-consumer waste.
2. Begin collection of Lory Student Center catering kitchen pre-consumer waste.
3. Work with Surplus Property staff to explore outlets to sell finished compost
4. Draft report to CDPHE of windrow composting program results.

WINDROW COMPOSTING STAFF DUTIES

Technician II:

1. Staffed ½ time on windrow composting operations and ½ time on in-vessel composter
2. Collects and records data used to develop the most effective recipe for maximizing quality of compost including quantity and type of feedstock materials and volume of water applied to windrows
3. Operates tractor and bin turner to maintain specified moisture content, microbial activity and temperature within windrows
4. Assists ISW program manager with compiling of data for annual report to CDPHE
5. Attends compost committee meetings
6. Performs routine operator maintenance on compost operations equipment including tractor and bin turner.

Equipment Operator III:

1. Utilizes side load truck to pick up feedstock materials from designated locations and deliver pulped food waste and paper towel waste to windrow site
2. Utilizes front load truck to pick up VTH and Equine Orthopedic Research Center barn waste and Horticulture Center and University Green House plant waste to windrow site
3. Assists the Compost Technician with other duties at the windrow composting site as directed by ISW program manager.

Composting Coordinator Position

The original concept for the windrow composting operation included a full time employee to manage the program, oversee interns and perform regulatory reporting, coordination and marketing. Although initial startup of the operation requires that labor expenses go towards the technician and operator positions described above, we plan to hire a person for the Composting Coordinator position after the first year of operations. In the meantime, Sheela
Backen the ISW manager will perform the intern oversight, coordination and regulatory reporting tasks.

Interns

Sheela Backen will hire and manage student interns as needed. Interns will assist with pile monitoring (temperature, moisture and oxygen monitoring), sampling and contamination control.

**FUNDING / INCOME (see attached ISW Windrow Composting Projected Income and Expenses)**

1. Continue to Expand Diversion Rate of Compostable Materials.
2. Reduced landfill expenses resulting from increased diversion rates will be utilized to offset windrow composting operations.
3. Non-RI facilities such as Lory Student Center, The Natural Resources Research Center and Housing and Dining Services facilities that participate in the program will be charged for services provided.
4. University landscaping projects that require compost will be required to purchase it from the program.
5. University Greenhouses and the Horticulture Center will be asked to purchase compost from the program as needed for their operations.
6. Explore opportunities to sell compost to non-university customers through Surplus Property.

**MARKETING**

Sheela Backen will coordinate with the College of Business to assign a project to students for preparing a marketing plan for the composting program. The marketing plan will include concepts and methods for educating the campus community on composting availability and prevention of contamination, maintaining awareness and exposure through social media, and evaluating the market for sale of compost.

**REGULATORY REPORTING**

Sheela Backen, with assistance from Susanne Cordery, will track and compile volume, monitoring and sampling data. They will prepare and submit an annual report to CDPHE before May 1st of each year.