

Composting of Food Waste at Reunity Resources in Santa Fe

Information from Reunity website and from tour on November 5, 2018

About Reunity Resources

- 501(c)3 organization with a Zero Waste goal
 - Cofounder and Executive Director Tejinder Ciano
 - Cofounder and Outreach Coordinator Julianna Ciano
- Started in 2011, collecting restaurant cooking oil to convert to biofuel
 - Keeps 500 tons CO2 out of atmosphere every year
 - Keeps cooking oil out of waste water plant
 - Reduces fossil fuel use
- Began growing food on Santa Fe Community Farm to donate to local hunger relief organizations
 - >10,000 pounds of produce donated to local food banks in 2018

About Reunity Composting Program

- Divert 1.4 million pounds of food waste from Santa Fe area landfill each year = 162,000 lb. CO2 reduction and methane reduction
- BPI-certified compostable plastics, paper bags, trays
- Aerated static pile composting facility that produces compost from
 - Food waste
 - Green waste
 - Manure
- Partner with 30 schools (50% of SF schools – public, private, charter) and have trained staff and 8,250+ students about cafeteria compost separation
- Facilitate food waste collection from 35 Santa Fe area restaurants

Implementing the Composting Program

- Initial setup cost: \$60,000
- Some work done by community groups and community service people
- Santa Fe City has been resistant to this change
- Must be prepared to offer the full system: equipment, schedule, training, and educational reminder materials
- Schools
 - Students initially more receptive than staff, and they inspired the staff
 - Reunity does a 3-day training program with students and staff
 - Results: Reducing trash by 1/3 saved enough money to make implementation of food collection cost neutral for schools
- Restaurants
 - Some had initial resistance to participation
 - Staff turnover and occasional non-compliance necessitate occasional retraining

Food Scraps Collection

Photographs with permission of Reunity Resources

- 64-gallon roll carts
- Collect 3 times/week, swapping empty cart for full cart
- Cover immediately with mulch to prevent odors and animal visits



Composting

- 1 acre with 4-6 windrows
- Site is unlined, no leaching or runoff, acceptable to NMED
- Layer food waste, service ware, mulch, and manure
- Cap piles with finished compost – prevents odor and animal visits



Aeration of Windrows

- 6" septic field pipes with quarter-size holes run length of windrow
- Air pumped through with bouncy-house blowers
- Static piles, not turned, keeps in moisture, reduces particulates and odors
- Temperature 130-160 F
- Finished compost in 15-30 days



Worm Composting

- Worms compost finished compost from outside piles
- In heated greenhouse. Shallow circular trays, kept moist with drip irrigation



Worm Composting

Cylindrical turning separator recovers worms from compost



Worm Composting

- Final vermicompost sold in bags or by the yard
- Also used in on-site community garden to produce >10,000 pounds of produce donated to local food banks

