

Preconference Workshop

Adding Food Waste to your Compost Facility

Operational and structural strategies to upgrade windrows and static piles to handle high energy feedstocks with mixes, pile shape, turning frequency and passive or forced aeration.

During this workshop the instructors will breakdown the process of making decisions on how best to use the tools and resources a facility already has or may want and transitioning the operation to handle the contaminants and the much more aggressive biological process that food wastes present.

Topics include: Feedstock energy/nutrient calculations and free air space, Contaminant removal, establishing pile height and widths along with turning frequency, Facility layout and capacity sizing, Passive aeration and forced aeration, Pipe and blower sizing, Air distribution design, Odor control and Biofiltration, Control System options, Pavement options, Understanding engineering tradeoffs.

The goal is to help composters understand the tradeoffs of different facility operation and design configurations by emphasizing their associated capital costs as well as permitting and odor implications.

Instructors: Jeff Gage, Michael Bryan Brown, Orion Bryan Brown and Jake Saavedra

Fee: \$320 for USCC members, \$395 for nonmembers

Duration: 9:00 AM to 4:30 PM, with one hour for lunch (not included)

CCOM™/CCP™ PDHs: 6.5

Agenda

1. Opening, How is food waste composting different than green waste, manure or biosolids composting?
2. General considerations for adding food waste
3. Overview of technologies Static Pile (SP), enhanced SP, Turned Windrow (TW), Aerated Static Pile (ASP) extended ASP (eASP), covered ASP (cASP), Aerated Turned Windrow (ATW) Slide Show
4. Pile Odor and Vector Control Systems using fleece, micropore covers or biocover, biofilters, indoor vs outdoor operations.
5. Detailed Discussion of facility Design:
6. Composting Recipes with Food waste
7. Facility layout and Site Design
8. Methods for maintaining adequate O2 and temperature levels

9. Stormwater design
10. Controlling the composting process
11. Q&A

About the instructors:

Jeff Gage: Senior Compost System Designer for GMT, Certified Composting Professional, 35 years developing composting infrastructure and operating facilities in the Western United States, developed Compost Facility Operator Training program for WORC and the USCC, Provided odor management workshops for USCC past 10 years.

Michael Bryan-Brown: President of Green Mountain Technologies, Developed and installed over 200 facilities worldwide to manage food waste, biosolids, and green waste. Holds three composting technology patents for aeration systems, containerized composting, and large-scale compost turning strategies.

Orion Black-Brown: Project Engineer for GMT providing system analysis for forced aeration systems and low pressure/convection flow systems.

Jake Saavedra: Process Controls Engineer for GMT providing facility startup and operator training on managing the composting process remotely.