Growing a Compost Facility

THE STORY OF A1 ORGANICS

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A1 ORGANICS
Eaton, Colorado
LOST ANTLERS
RATTLER RIDGE
400+ acres
STAPLETON, CO
MANY LOCATIONS
Las Vegas, Phoenix, Platteville
Current Composting Methods

- Aerated Windrow (AW)
- Modified Static Aerobic Pile (MSAP)
- Pro-Bio
DIVERSE FEEDSTOCKS

- Green Waste (tree limbs, logs, grass, leaves)
- Biosolids
- Grease Cap
- Paunch Manure
- Screenings
- Grit
- Food Waste (clean, “dirty”, curbside residential, production, process, FOG)
- “Money”
- Manure
- Dairy (milk processing)
- DAF
- De-fill liquids
- Brewery
Aerated Windrow (AW)
COMPOSTING

Aerated Windrow (AW)
1. Mix feedstocks (provide suitable C:N Ratio & adequate moisture)
2. Construct windrow
3. Apply inoculant (applied to surface of pile in 2 or 3 locations)
4. Cap the windrow (unscreened compost, overs, or ground yard waste)
5. Pile remains undisturbed for approximately 4 weeks
6. First turn (Day 30)
7. Second turn (Day 45)
8. Screen (Day 60)
Movement of the microbes from the outside in draws oxygen towards the core of the pile.

Windrows have the ability to largely remain aerobic without the need for frequent turning.
WHAT ARE THE INOCULANTS?

- An extremely diverse blend of enzyme-producing bacteria
- A broad array of fungi
- Microbes are propagated and introduced into a precisely blended carrier material made from natural organic feedstocks
- Totally unique and unlike traditional bottled bugs

A LIVING, BREATHING AND HIGHLY ROBUST PRODUCT
• The microbes multiply and move rapidly
  ✓ Outwards (horizontally) initially
  ✓ Then inwards (towards the center of the pile)

• This activity generates high temperatures well in excess of pathogen destruction 131°F (55°C)

• Increased bacterial activity makes for hotter composting temperatures

• By not continually turning the rows, high bacteria densities are maintained, thus increasing efficiency
Pro-Bio
Cleared Beds

Dry Bottom
Aerated Windrows Testing
Some Thoughts on Markets

- Developing Products - Branding
- Large and Niche Markets
- Product Quality
- Analytical
- Specifications
- Value Proposition
- Close the “Loop”
HARDEST CHALLENGES

- Loss of Duane and Chuck Wilson
- Regulatory Impacts and Effects - Past and Future
  - Politics vs. Logic and Common Sense – Silo’s
  - Urban Expansion - NIMBY
- Loss of sites – outside of our control
  - Heartland Biogas
  - Las Vegas
  - Phoenix
  - Lost Antlers, HWY 66, Stapleton
WHAT’S NEXT

- New Acquisitions for Growth
- New Product Expansion
- New Technology
  - Production/Operations
  - Products
  - Information
  - Stay ahead, look for better and best, listen
THANK YOU, ANY QUESTIONS?