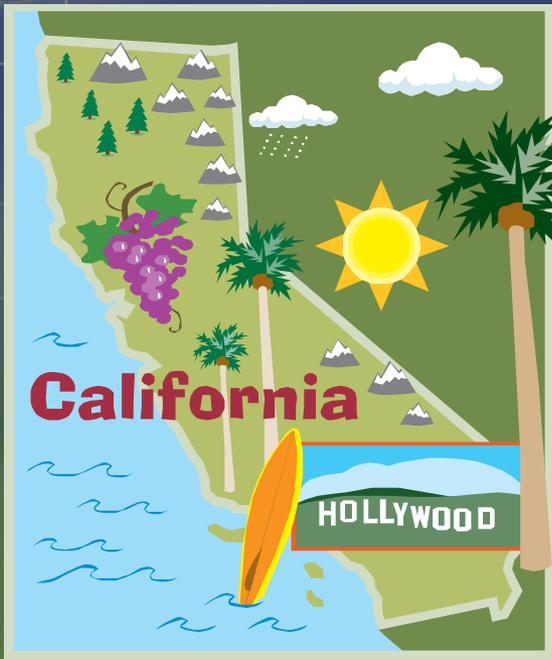


Large Scale Food and Packaging Material Composting



Collecting and composting more than just food scraps...

California's Motivation On a Local Level



- 35 Million Tons per year Disposed
- 32% is "Organic"
- 50% Organic Target = 5.6 Million Tons
- 37 Million Population Statewide
- 300 Pounds/Year/Person Statewide
- 330,000 People in Bakersfield
- 49,000 new "Organic" Tons in Bakersfield

“Food Waste Only” vs. “Organics”

Added fiber increases volume!



Food Waste in Convenience Packaging Who will separate it and how?



Collection economy depends on bags. “Baggage” can be plastic or compostable.



Compostable Plastic Bags?

- Compostable plastic bags cost about \$0.75 each
- Regular bags cost \$0.10 each
- About 25 bags per daily bin at schools
- Extra bag cost = \$16.25 per daily bin served
- About 500 pounds of feedstock per bin
- Extra bag cost = \$65 per ton



Compostable Materials

Are they trash, or are they feedstock?

You say To-MAY-to

I say To-MAH-to



**Just know what comes into the system,
and remember – Garbage In, Garbage Out!**

Curbside Recycling Analogy

Curbside Recycling has 20% reject material.

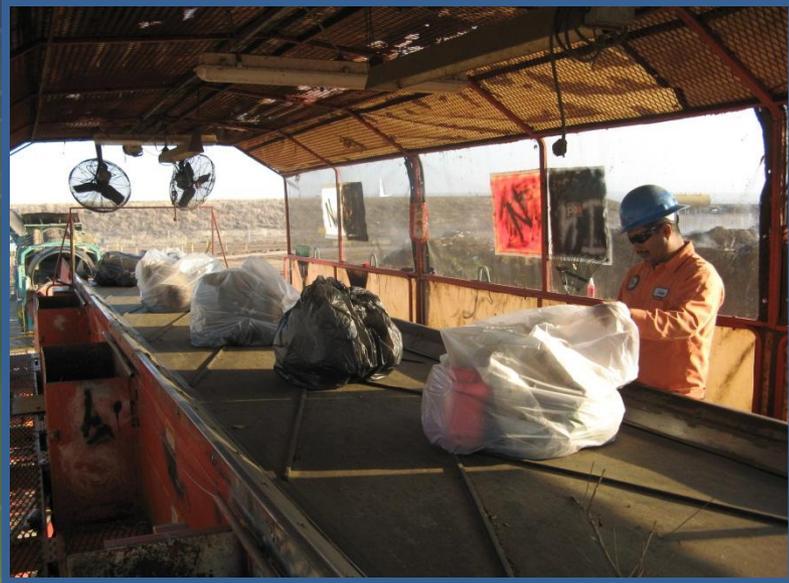


School Composting has a 1% reject rate, even with plastic bags and packaging!



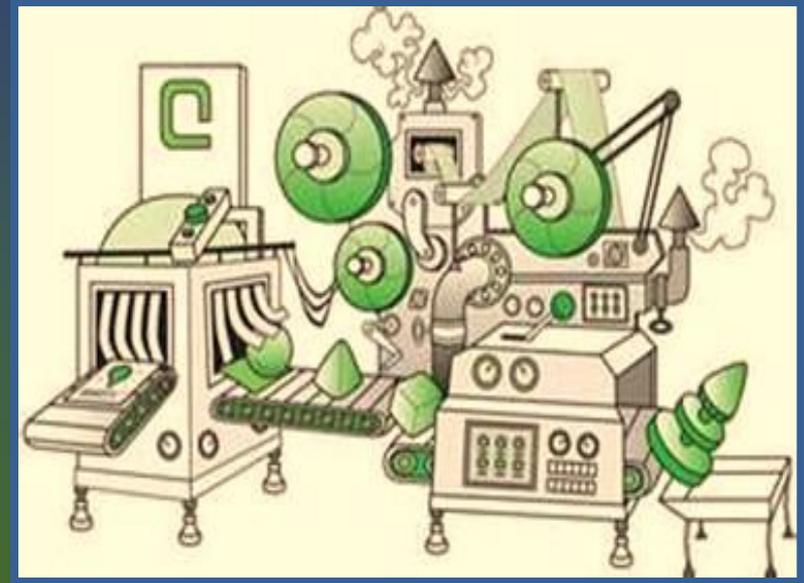
How to Handle Plastic Bags?

Manually Empty?



NO – Too Much Labor!

De-bagging Machines



Not Yet Practical

Receiving And Grinding Process



Co-Shredding With Greenwaste

- Greenwaste is absorbent
- Greenwaste weighs down the shreds
- Material berms confine shreds
- Size reduction is done
- Mixing is done



Windrow Management

Without
Cafeteria Waste



With
Cafeteria Waste



Avoid Making Plastic Smaller

Old Turner Drum With
Teeth



New Turner Drum With
Paddles



Minimize Degradation Time

Sunshine and Compost Heat Make Plastic Brittle



Avoid "Spearing" Through Screen



Capture Plastic Film with Air Flow



Control Remaining Litter

Cross-Berm Food Waste Area



Litter Fence Along Berm

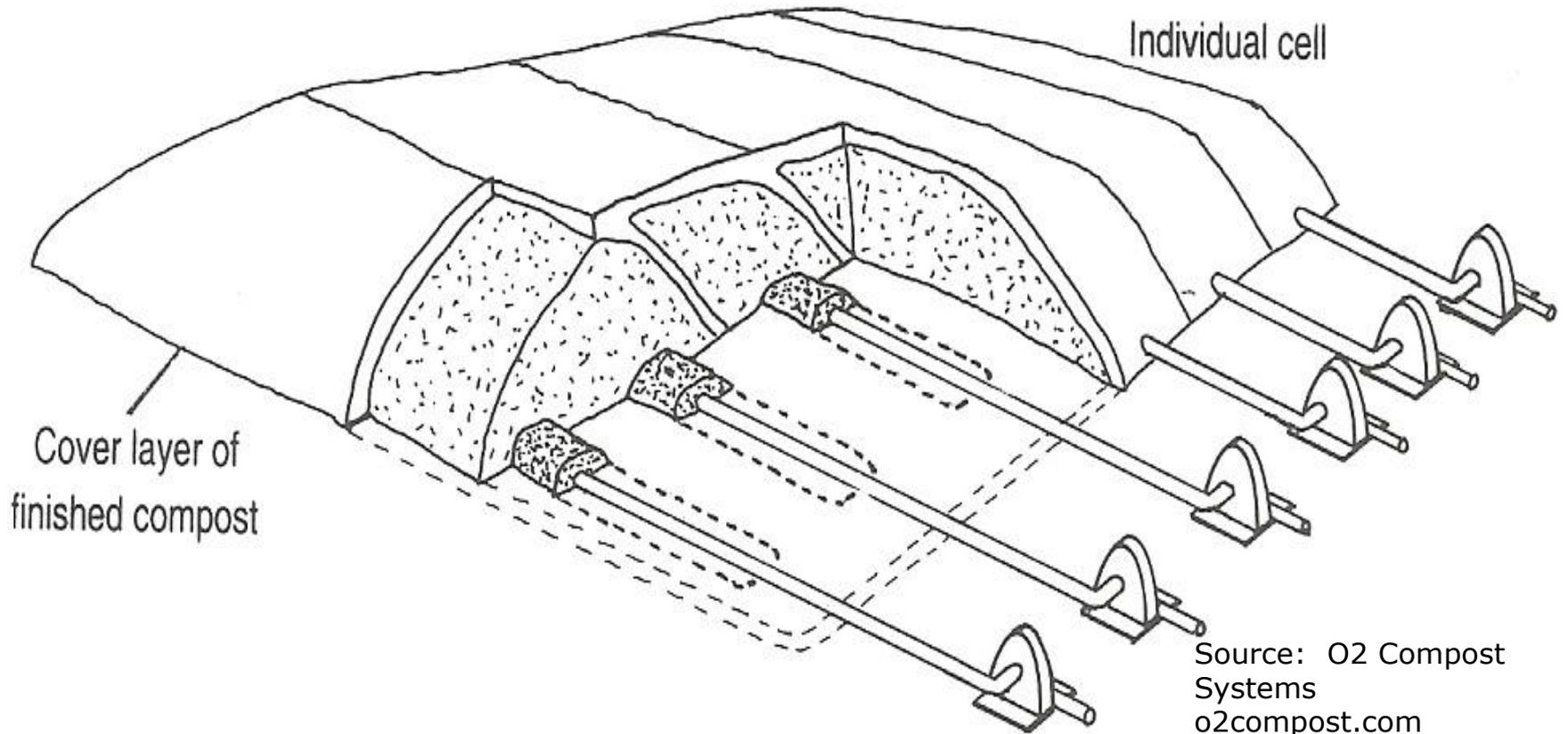


Finished Product



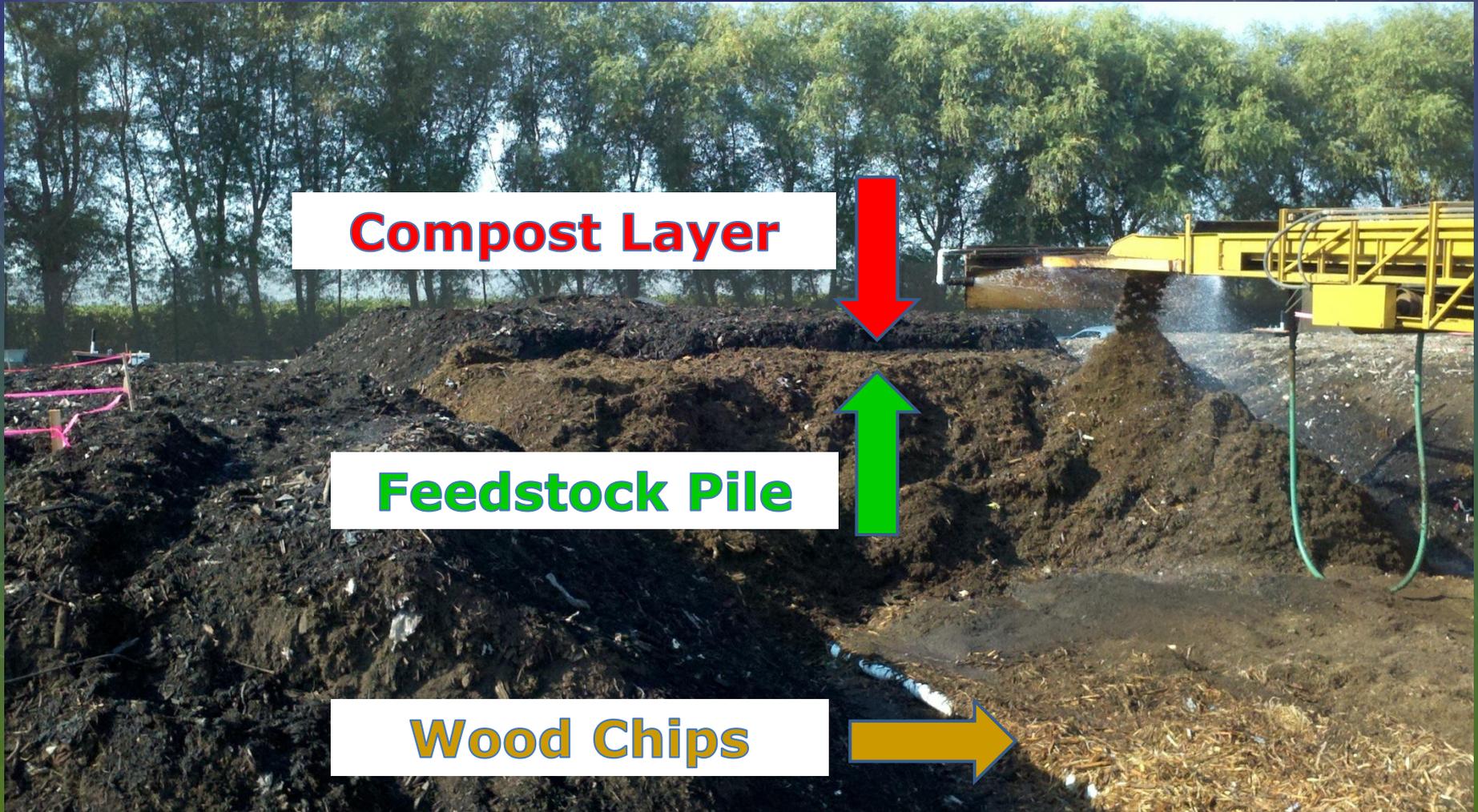
New Advances in Composting

Covered aerated static piles require less turning, for better plastic separation.



New Advances in Composting

Covered aerated static piles keep litter in, critters out.



Questions?

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