Trailblazing Organics Programs

Presented to SWANA – Huntington Beach, CA
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September 8, 2016
Today’s Topics

1. Who’s doing what?
2. Where can it go?
3. What does it cost?
4. What are the challenges and risks?
California’s Statewide Diversion Rates

- AB 939 Passed in 1989
- AB 939 50% Diversion Goal 2000
- AB 939 25% Diversion Goal 1995
- Per-capita Disposal Baseline 2003-2006
- 2006 Housing Bubble Peak
- Dec. 2007 Great Recession Begins
- Recession Ends Q3 2009
- 63% in 2015
- AB 341 Mandatory Commercial Recycling 2012
Key Organics Regulations

1. AB 1826 - Organics Landfill Ban - Food waste and other organics to be phased out of disposal tonnage. Phase in schedule for businesses:
   – April 1, 2016: 8 cubic yards of organic waste per week
   – January 1, 2017: 4 cubic yards of organic waste per week
   – January 1, 2019: 4 cubic yards or more of solid waste per week
   – Summer/Fall 2021: 2 cubic yards of solid waste if organics disposal has not been reduced by 50% since 2014

2. AB 1594 - Alternative Daily Cover – Elimination of diversion credit for green waste used as alternative daily cover beginning January 1, 2020.
Proposed CARB Organics Strategy

• CARB (California Air Resources Board)
  – May phase in organics’ landfill ban and are currently targeting a 90%-95% reduction in organics to landfill on top of AB 1826
  – The strategy is a draft and is still in the review/comment period – pending till after 2016 elections

ONE DOES NOT SIMPLY
SEW UP THE OZONE LAYER
Recycling Ordinances

• City of Hawthorne
  – Customers who do not implement recycling services that fall under the implementation schedule may be issued administrative fines
  – Will probably be a minimum $50 fine for first offense with incremental increases thereafter
  – Assists City in complying with AB 341 and AB 1826
Organics In the Disposal Waste Stream

- Organics: 39%
- Other: 61%

CalRecycle 2014 - Southern California Waste Stream
# Source Separated Commercial Organics Programs

## Organics Rate Different than Refuse Rate (2-yard bins 1x/week)

<table>
<thead>
<tr>
<th>City</th>
<th>Hauler</th>
<th>Monthly Rate</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Refuse</td>
<td>Organics</td>
</tr>
<tr>
<td>Laguna Hills</td>
<td>CR&amp;R</td>
<td>$165.00</td>
<td>$68.16</td>
</tr>
<tr>
<td>Lake Forest</td>
<td>CR&amp;R</td>
<td>$63.12</td>
<td>$31.66</td>
</tr>
<tr>
<td>Tustin</td>
<td>CR&amp;R</td>
<td>$79.91</td>
<td>$40.55</td>
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<tr>
<td>El Monte</td>
<td>Valley Vista Services</td>
<td>$108.21</td>
<td>$195.96</td>
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<tr>
<td>Irvine</td>
<td>Waste Management</td>
<td>$100.81</td>
<td>$185.47</td>
</tr>
<tr>
<td>San Clemente</td>
<td>CR&amp;R</td>
<td>$95.93*</td>
<td>$257.93</td>
</tr>
<tr>
<td>Aliso Viejo</td>
<td>CR&amp;R</td>
<td>$76.62*</td>
<td>$211.14</td>
</tr>
</tbody>
</table>

*2-yard refuse service not offered. Rate shown is 2/3 of 3-yard rate.*
Source Separated Commercial Organics Programs

Refuse Rate = Organics Rate

<table>
<thead>
<tr>
<th>City</th>
<th>Hauler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inglewood</td>
<td>Republic Services</td>
</tr>
<tr>
<td>Ontario</td>
<td>Municipal</td>
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</table>
## Organics Cart Rates – 1x/week

<table>
<thead>
<tr>
<th>City</th>
<th>Hauler</th>
<th>Size (Gallons)</th>
<th>Rate per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tustin</td>
<td>CR&amp;R</td>
<td>65</td>
<td>$15.60</td>
</tr>
<tr>
<td>Orange</td>
<td>CR&amp;R</td>
<td>64</td>
<td>$19.35</td>
</tr>
<tr>
<td>Lake Forest</td>
<td>CR&amp;R</td>
<td>65</td>
<td>$22.40</td>
</tr>
<tr>
<td>Huntington Park</td>
<td>UPW</td>
<td>65</td>
<td>$28.00</td>
</tr>
<tr>
<td>Dana Point</td>
<td>CR&amp;R</td>
<td>67 or 95</td>
<td>$29.85</td>
</tr>
<tr>
<td>San Clemente</td>
<td>CR&amp;R</td>
<td>65</td>
<td>$44.42</td>
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<tr>
<td>Irvine</td>
<td>Waste Management</td>
<td>64</td>
<td>$46.37</td>
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<tr>
<td>Aliso Viejo</td>
<td>CR&amp;R</td>
<td>65</td>
<td>$73.89</td>
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</tbody>
</table>
Example Bag-Based Commercial Organics Programs
(No additional container fee)

• City of Laguna Beach

• City of Lawndale
Mixed Waste Organics Recovery From Restaurant or Food Establishment Routes

- City of West Hollywood
- Beverly Hills
Infrastructure Requirements

- Material Recovery Facilities
  - Preparing material for conversion technology or composting facilities
- Composting Facilities
- Anaerobic Digesters
- Energy Contracts/Grid Connections
Organics A.D. Facilities - SoCal

- Waste Management “CORe” (Orange)
- CR&R/Perris
- Puente Hills MRF
Organics A.D. Facilities – Bay Area

- Zero Waste Energy Development Co. (San Jose)
- CleanWorld Sacramento
- Monterey Regional Waste Management District – Zero Waste Energy
- East Bay MUD
Waste Management “CORRe”
Puente Hills MRF - AD
CleanWorld Sacramento - AD
Monterey Regional Waste Management District with Zero Waste Energy
East Bay MUD
Proposed Organics A.D. Facilities

• Anaergia
  – Anaheim Sustainability Center
  – Rialto

• Mustang partnership with Santa Barbara County
Existing Composting Facilities

- Tierra Verde* – Located in Irvine, permitted 3,000 tpd.
- Miramar Greenery – Located in San Diego, permitted 690 tpd. (Clean, pre-approved commercial food waste)
- Evergreen Nursery* – located in Oceanside, permitted 500 cubic yards/day

*No food waste composting
Another Option?
“Food Waste to Animal Feed”

- Sustainable Alternative Feed Enterprises (SAFE)
  - Creates 3 commodities: animal feed, reclaimed water, FOG
  - New facility proposed in LA, currently located in Santa Clara
  - No SW facility permitting required due to manufacturing operation of food waste to feed product
  - For more information go to: Feedtofork.com
ADC Tons by County - 2015

- Orange: 622,486
- Los Angeles: 280,647
- San Bernardino: 154,633
- Riverside: 166,312
- San Diego: 308,484
• 622,000 tons of green waste accepted as ADC in 2015 at O.C. landfills at no charge – pre-processed & ready to apply. Equates to 2,026 tons per day, 307 days/year.

• Riverside County charges $10.00/ton (pre-processed)

• San Bernardino County accepts green waste as ADC from Athens by contract at $14.43/ton (pre-processed).

• LACSD facilities receive segregated uncontaminated green waste at prices from $31.98 to $41.50/ton
Overall Observations

- Costs
- Facility Development
- Risks
- Contracts
THE CHOICE IS CLEAR

COMPOST 2020!
Thank you!

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