SB 1383

Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions
SB 1383: The Road Ahead

- What does SB 1383 Require?
- What is Organic Waste?
- How Many Tons?
- Why Organic Waste?
- Where Are We Today?
- What Is Needed?
- How Do We Get There?
  - Regulations
  - New Facilities (Permitting/Capital Investment)
- How Does This Impact You?
What does SB 1383 Require?

- ARB must present plan by January 1, 2018 to reduce short-lived climate pollutant emissions below 2013 levels by 2030 of:
  - Methane by 40%
  - Hydroflourocarbons by 40%
  - Anthropogenic black carbon by 50%
- Plan was approved March 2017
- ARB work with other agencies to meet goals
  - CDFA
  - PUC, CEC
  - CalRecycle
What does SB 1383 Require?

Waste Sector Targets

- **50% reduction** in the level of the statewide disposal of organic waste from the 2014 level by 2020.
- **75% reduction** in the level of the statewide disposal of organic waste from the 2014 level by 2025.
- **20 percent improvement in edible food recovery** by 2025.

**HSC 39730.6(a)**

SEC. 3. Section 39730.6 is added to the Health and Safety Code, to read:

39730.6. (a) Consistent with Section 39730.5, methane emissions reduction goals shall include the following targets to reduce the landfill disposal of organics:

1. A 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020.
2. A 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

**PRC 42652.5(a)(2)**

(2) Shall include requirements intended to meet the goal that not less than 20 percent of edible food that is currently disposed of is recovered for human consumption by 2025.
What Is Organic Waste?

SB 1383 Draft Regulatory Definition

“Organic Waste” means solid wastes containing material originated from living organisms and their metabolic waste products, including but not limited to food waste, green waste, landscape and pruning waste, applicable textiles and carpets, wood, lumber, fiber, manure, biosolids, digestate and sludges.
What Is Organic Waste?

Green materials

Food materials

Wood waste

Fiber (Paper and Cardboard)

Biosolids
How Many Tons?

- +/- 23 Million Tons Of Organic Waste
- +/- 66% of Total Disposal

*CalRecycle and ARB are currently in the process of determining activities that count as disposal for the purposes of SB 1383.
How Many Tons?

- Landfill Disposal - Organics
- Landfill Disposal - Other

Year

2014: 22.9
2015: 24.4
2016: 25.7

+/- 17M
+/- 20M
Why Organic Waste?

SLCP Requires a 40% Reduction in Methane Emissions Across California

Landfilling of Organic Waste Creates Methane
Why Organic Waste?

- Achieving SB 1383 Organic Waste Reductions
  - Reduces landfill emissions by 4 MMTCO2e in 2030.
  - Avoids 14 MMTCO2e emissions over the lifetime of waste decomposition.

Help reduce your CH4 emissions by reducing waste to landfills!
Where Are We Today?

- Existing Organics Recycling Infrastructure
  - Recycles (+/-) 6 Million Tons Annually

- Existing Statutes
  - AB 341 (Chesbro 2011) - 75% & Mandatory Commercial Recycling
  - AB 1826 (Chesbro, 2014) Mandatory Commercial Organics Recycling (phased in through 2020)
  - AB 1594 (Williams, 2015) Green Waste Landfill Cover
  - AB 901 (Gordon, 2015) Recycling Tracking

- Existing Local Policies and Ordinances

- Cap and Trade Funding For Organics Recycling Infrastructure
  - $39 Million - Organics Recycling Infrastructure Grants
  - “Green Sword” China’s New Recycling Import Standards
Where Are We Today?

**SB 1383 Organic Waste Reduction Target**

Allowable Disposal of Organics Statewide

- **Projected Organics in Disposal and Disposal-Related (Business As Usual)**
- **Maximum Allowable Tons of Organics Disposal and Disposal-Related to Meet 2020 (50%) and 2025 (75%) Mandates**
- **Historical Organics in Disposal and Disposal-Related**

- Projected disposal levels from 1988 to 2029:
  - 2000: 22.9 Million Tons
  - 2015: 11.5 Million Tons
  - 2029: 5.7 Million Tons

Graph showing the trend of allowable disposal of organics statewide from 1988 to 2050.
NEW RECYCLING INFRASTRUCTURE & CAPACITY

- Organics Recycling Capacity
  - 2020 Additional 10 Million TPY
  - 2025 Additional 20 Million TPY (growing each year thereafter)

Facilities Needed to Handle Additional 10 million tons
- At 500 TPD \(\rightarrow\) 180,000 TPY \(\rightarrow\) ~50 expansions or new
- At 300 TPD \(\rightarrow\) 100,000 TPY \(\rightarrow\) ~ 100 expansions or new
- At 1000 TPD \(\rightarrow\) 365,000 TPY \(\rightarrow\) ~ 30 expansions or new

30-100 expansions or new facilities needed
How Do We Get There?

1. SB 1383 Regulations
2. Capital Investments (Public and Private)
3. Collaboration on Cross-Medial Regulatory Issues
How Do We Get There? **Regulations**

**SB 1383 Rulemaking Schedule**

- 2017 informal rulemaking workshops
- 2018 formal rulemaking and adoption of regulations
- **2020 50 Percent Reduction in organics disposal (≤ 10M tons)**
- 2020 Analysis on Waste Sector Progress
  - [2022 Regulations Take Effect](#)
- **2025 75 percent reduction in organics disposal (≤ 5M tons)**
Entities Included In SB 1383 Regulations

- Cities and Counties
- Local Enforcement Agencies
- Generators*
- Haulers
- Solid Waste Facilities and Recyclers
- Food Recovery Organizations
- End-users of Recycled Organic Products

*Generators includes entities that are outside of the authority of a jurisdiction such as state entities, federal facilities, and school districts.
How Do We Get There? Regulations

Key SB 1383 Regulatory Concepts

- Methane Based Disposal and Recycling Quantification
- Collection Requirements
  - Required Source-Separated Collection
  - Grandfathered Mixed Waste Collection
- Edible Food Recovery
- Planning Requirements
- Market Development, Market Barriers, and Procurement
- Solid Waste Facility Standards
- Enforcement
- Reporting
How Do We Get There? Capital Investments

Investment of $2-3 Billion to handle 10 M TPY

- Composting → $8-15 M for 100,000 TPY facility
- Anaerobic digestion → $3-$50 M for 100,000 TPY
- Upgrade WWTP facility ➔ $1.3-$35 M

Public and Private Sector Investments Are Critical
Permitting of 100+ New Facilities Requires Collaboration

<table>
<thead>
<tr>
<th>Statewide Entities</th>
<th>Local Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalEPA</td>
<td>Air Districts</td>
</tr>
<tr>
<td>CalRecycle</td>
<td>Regional Water Board</td>
</tr>
<tr>
<td>ARB</td>
<td>Local Planning Agencies</td>
</tr>
<tr>
<td>SWRCB</td>
<td>Local Enforcement Agencies</td>
</tr>
<tr>
<td>CDFA</td>
<td></td>
</tr>
</tbody>
</table>
How Does This Impact You?

**How can SB 1383 efforts complement mission of Air Districts?**

- Reduce transportation emissions - e.g., RNG vehicles
- Establish best management practices at organic waste recycling facilities.
- Encourage smaller community scale operations where possible.
- Require local planning agencies to engage regulatory entities early
- Are there policies that air districts could adopt to discourage landfill disposal of organics? And/or encourage siting of composting and anaerobic digesters?

**Discussion on Permitting**

- Consideration of Air Quality Impacts
SB 1383 Regulatory Process

Tell us what YOU think

Draft Regulatory Language Workshop

- Webpage: http://www.calrecycle.ca.gov/climate/slcp/
- Inbox: SLCP.Organics@calrecycle.ca.gov