



# Organic Waste Management in Rhode Island

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# Expansion of Organic Waste Management

- ▶ Small Scale Composting Facilities
- ▶ Medium Scale Composting Facilities
- ▶ Anaerobic Digestion Facilities
- ▶ Modification of Existing Composting Facilities Regulations
  - ▶ Leaf and Yard Waste (large scale)
  - ▶ Putrescible Waste (large scale)

# Drivers of Organic Waste Management Regulations

1. Small and Medium Scale Composting Initiatives
  - ▶ Reuse Organic Wastes (leaf and yard + food)
  - ▶ Make compost
2. A.D. facility interest in RI
3. Waste Handling Hierarchy
4. Landfill finite life + future alternate disposal costs
5. Compost Law (“Food Waste Ban”)

# Food Waste Ban

## RIGL 23-19.9-17

- ▶ Effective 1/1/2016
- ▶ Commercial and Various Institutional Organic Waste Generators
- ▶ >104 tons/yr organic waste
  - ▶ Food scraps
  - ▶ Food processing waste
  - ▶ Soiled paper
  - ▶ Non-recyclable paper
- ▶ 1/11/2018 > 52 Tons/yr Organic Waste

# Food Waste Ban RIGL 23-19.9-17 (continued)

- ▶ Within 15 miles of compost or A.D. Facility
- ▶ Waste Handling Options
  - ▶ Send to compost facility
  - ▶ Send to A.D. facility
  - ▶ For agricultural use (animal feed)
  - ▶ Recycle or treat on-site
- ▶ Waiver option: facility fee > RIRRC non-contract commercial tipping fee

# RI composting facility regulations

- ▶ **Revised May 2016**
- ▶ **Office of Waste Management's Solid Waste Regulation #8**
- ▶ **Rules 8.0-8.8 Applies to Compost Facilities**
  - ▶ **Small-Scale Leaf and Yard Waste and/or Putrescible Waste Composting Operations**
  - ▶ **Medium-Scale Leaf and Yard Waste and/or Putrescible Waste Composting Facilities**
  - ▶ **Rule 8.1-8.2 Large Scale Leaf and Yard Waste Composting Facilities**
  - ▶ **Rule 8.3-8.4 Large Scale Putrescible Waste Composting Facilities**

# Composting Facility Comparison

	Small-scale	Medium-scale	Large-scale
Waste Quantity (yds <sup>3</sup> )	0-25	25-600	>600
Waste Types			
Leaf and Yard Waste?	Yes	Yes	Yes
Putrescible Wastes	Limited types	More types (pilot program)	Extensive types
Buffer zone requirements	No	No	Yes
Operating standards	No*	No*	Yes
Finished compost quality	Class A	Class A	Class A, B or C per defined markets

\*no adverse effects- surface groundwater, wetlands, odors, vectors, dust, litter

# Composting Facility Comparison Continued

	Small-scale	Medium-scale	Large-scale
Registration Requirement	No	Yes (at start)	Yes (every 3 years)
Registration Fee	n/a	No	Yes- putrescible waste (\$3000)
Registration details	n/a	Moderate number	Larger number
DEM inspections rights	Yes	Yes	Yes
Dem enforcement actions	Temporary halt receiving waste	<ol style="list-style-type: none"> <li>1. Temporary halt receiving waste</li> <li>2. Penalty option</li> </ol>	<ol style="list-style-type: none"> <li>1. Extensive scope</li> <li>2. Penalty option</li> <li>3. Can close facility</li> </ol>



# RI A.D. facility regulations

- ▶ **Effective May 2016**
- ▶ **Office of Waste Management's Solid Waste Regulation #8**
- ▶ **Rules 8.9-8.11 A.D. Facilities (all size facilities)**
  - ▶ **No size subsets**
- ▶ **Applies to A.D. Facilities accepting solid and liquid organics**
  - ▶ **Typically Food Waste and animal manure**
  - ▶ **No biosolids- OWR digestion facility regulations**

# A.D. Regulation Details

- ▶ Rule 8.9- licensing requirements
- ▶ Rule 8.10- design standards
- ▶ Rule 8.11- operating standards

# A.D. Rule 8.9

- ▶ **\$10,000 license fee**
- ▶ **License application**
- ▶ **License process:**
  - ▶ **Approval of license application**
  - ▶ **Public information workshop- per state law**
  - ▶ **Public comment hearing- per state law**

# A.D. Licensing application

1. Radius plan
2. Site plan
3. Construction and engineering plans
4. Summary description facility design and operations
5. Odor/aesthetics consideration
6. Operating plan
7. Product storage and marketing plan
8. Facility closure plan

# A.D. regulation details basis:

1. Concepts employed in RI composting regulations
2. Review/adoption of appropriate portions of other states AD regulations
3. Input from Regulated Community and State Food Policy Council
  1. AD applicant commented on draft regulations

# History of A.D. Facility Regulation Usage

1. One facility is in licensing process
  - ▶ Currently preparing license application
2. No operating facilities, past or current
3. Current applicant:
  - ▶ Approx. 200 tons/day organic input
  - ▶ Wet digestion process
  - ▶ Methane- 3.2 MW combined with power production
  - ▶ Solid digestate- compost facility input
  - ▶ Has secured air permit and wastewater discharge permits