

Massachusetts Organics Action Plan



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Policy Framework and Goals

- Primary Goal – Divert additional 350,000 tons per year of organic materials from disposal by 2020
- Solid Waste Master Plan
 - Overall goal – reduce disposal by 2 million tons (30 %) annually by 2020
 - Reduce disposal by 80% by 2050
- Clean Energy Results Program
 - Support the development of renewable energy in Mass.
 - Goal to have 50 MW of anaerobic digestion in place by 2020

Why focus on food waste/organics?

- Food waste and other organics >25% of disposal in Mass. > 1 million tons per year
- 2010 MSW disposal = 4.7 million tons
- Food waste estimated 15% of MSW disposal
- Compostable paper 6 % of MSW disposal

Benefits

- Opportunity to digest for energy and/or compost to produce soil amendments/fertilizers
- Management solutions for dairy manure & wastewater residuals
- Opportunity to generate energy at farms, WWTPs, other locations
- Cost effective materials management for businesses/institutions
- Reduced reliance on disposal capacity

Organics Action Plan Overview

- Comprehensive, integrated set of strategies
- Developed working with stakeholders
- Focused on 2020 goal – 350 K tons additional diversion annually
 - Data Analysis
 - Collection Infrastructure
 - Processing Capacity/Market Development
 - Regulatory Reform/Waste Ban

Current Status/Progress to Date

- Estimate about 100,000 tons of food waste diverted from solid waste disposal/year
- Composting – farms and small commercial sites – about 25 locations
- Pig farms/animal feed
- On-site systems
- At least 400 businesses/institutions now diverting food waste – includes 300 supermarkets
- Growth in hauling services

Improved Data

- Food waste density mapping study – updated 2011
- Waste characterization studies – food waste summary available online
- Completed survey of food waste management at state facilities
- Survey to gain more information on food manufacturers/processors

Building Collection Infrastructure

- Guidance on food waste reduction/donation
- Best management practices guidance
 - By business sector
 - For local health departments/haulers
- Recycling Loan Fund – haulers eligible
- Residential/small business collection pilot programs
- Regionally focused projects
 - Pioneer Valley, Devens, Worcester
 - Build route density

Technical Assistance to Generators

- Recycling Works in Massachusetts
 - Website
 - Service provider database
 - Guidance/fact sheets/case studies
 - Site specific TA
 - WasteWise and other workshops
- Assistance to targeted sectors
 - Supermarkets
 - Hotels/large restaurants
 - Colleges/universities
 - State facilities
 - Food manufacturers/processors

Growing Processing Capacity/Markets

- Solid waste regulations siting changes
 - Expect to be promulgated November 23, 2012
 - Clarify requirements, reduce siting barriers
 - Exempt very small operations/activities
 - Facilities taking source separated materials do not require solid waste facility site assignment
 - Either permit by rule or facility permit based on type & size
 - Required best management practices
 - Allow WWTPs to accept food waste to AD w/o being solid waste facility

Market Development

- Financial assistance matrix available online
 - MassDEP Recycling Loan Fund
 - MassDEP Municipal Grants
 - Mass Clean Energy Center Organics to Energy program
- Recent net metering changes
- Other funding sources can be leveraged
- Siting facilities on state property
- Use state contracts as opportunity to build demand
- Marketing workshops

Waste Ban Development

- Solid Waste disposal ban proposed for summer 2014
- Food waste and vegetative material
- Does not apply to management in wastewater
- Commercial/institutional organics – generators > 1 ton/week
- Estimate – 3,000 businesses/institutions subject to the ban
- Develop rule of thumb guidance by sector
- Propose voluntary certification program for businesses

Estimated Generation by Sector

Table 2 Food Waste Generation Estimates by Generator Category ¹	
Hospitals	Food waste (lbs/yr) = N of beds * 5.7 meals/bed/day * 0.6 lbs food waste/meal * 365 days/yr
Nursing Homes and Similar Facilities	Food waste (lbs/yr) = N of beds * 3.0 meals/bed/day * 0.6 lbs food waste/meal * 365 days/yr
Colleges, Universities, and Independent Preparatory Schools Residential Institutions	Food waste (lbs/yr) = 0.35 lbs/meal * N of students * 405 meals/student/yr
Non-Residential Institutions (e.g., community colleges)	Food waste (lbs/yr) = 0.35 lbs/meal * N of students * 108 meals/student/yr
Correctional Facilities	Food waste (lbs/yr) = 1.0 lb/inmate/day * N of inmates * 365 days/yr
Resorts / Conference Properties	Food waste (lbs/yr) = 1.0 lbs/meal * N of meals/seat/day ² * N of seats * 365 days/yr
Supermarkets	Food waste (lbs/year) = N of employees * 3,000 lbs/employee/yr
Restaurants	Food waste (lbs/year) = N of employees * 3,000 lbs/employee/yr

Waste Ban Development

- Waste bans monitored/enforced @ solid waste facilities
- Would update/modify waste ban guidance for facilities
 - would require revised facility plan
 - Propose action level threshold of 10% by volume
- Working Schedule
 - Draft regulations and guidance – early 2013
 - Final regulations and guidance – summer 2013
 - Effective date – summer 2014

Contact Information

www.mass.gov/dep/public/committee/swacorg.htm

www.mass.gov/dep/recycle/reduce/commorg.htm

<http://www.mass.gov/dep/cleanenergy.htm>

www.recyclingworksma.com

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